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# MEDICAL TIMES.

# A BI-WEEKLY JOURNAL

OF

# MEDICAL AND SURGICAL SCIENCE.

VOL. IX.

1878-1879.

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# PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, OCTOBER 12, 1878.

#### ORIGINAL COMMUNICATIONS.

"WHO IS TO BLAME?"

BY W. R. D. BI.ACKWOOD, M.D., Philadelphia.

(Read before the Philadelphia County Medical Society at a Conversational Meeting held September 11, 1878.)

IN many instances the medical attendant of a family is applied to to discover the cause of sterility, and, if possible, bring relief. Can we do anything in the way of relief? Undoubtedly we can; frequently we do. The question here arises, Do we always do the best in our power? and the answer, we fear, sometimes must be, We do not. Why? Simply because, in attempting to remedy the defect, too frequently attention is concentrated upon a part only of the mechanism involved. Take the history of such cases, and what do we find? It depends largely upon the taste and inclination of the family physician what course is pursued. Sometimes medical means are employed: the lady is ordered change of air and scene; she goes on an ocean voyage, or perhaps only to the sea-shore. She may again resort to the mountains, to various mineral spas, or the water of these, with tonics and diet, be ordered at home. Again, the surgical course may be adopted, if her attendant be progressive and an aspirant for gynæcological fame. In this event a siege is probably instituted, which, if persevered in, sometimes succeeds, but frequently results only in reducing the health and spirits of the unfortunate patient. The variety of causes suggested as productive of sterility, and the number of operations proposed for the relief of these abnormalities, are only equalled by the number and variety of instruments which have been invented, modified, and improved upon for the performance of these operations. For some years past I have kept account of the armament as embodied in new and old suggestions, together with the author's pet surgical tools (for all writers have instruments of their own devising, as they suppose, though hundreds of them existed in years long gone by), and the list is one tremendous to contemplate. The abnormal condition of the organs concerned,

the versions, the flexions, the strictures, the irritabilities, the inflammations, which are brought to light by dozens of different specula, -only one of which is worth possessing, according to the authority consulted, -and which are rectified by hundreds of pessaries of every imaginable shape and material, with probing, scarifying, stretching, dilating, incising, cauterizing, and amputating, are marvellous, considering how much of this trouble existed without the knowledge of the patient before the doctor got hold of her, and also how little of improvement there too often is after he gets through his list of opera-That good is accomplished now and then through surgical means is admitted; it cannot be denied. In my own practice, some years ago, two cases of sterility were successfully treated by dilatation of the cervix uteri through the medium of Peaslee's bougies, and since that time other cases have been relieved,— Ellinger's dilator being substituted as being not only more convenient, but because the dilating force is thereby applied laterally, and proportionally to the power applied; whereas in the case of the sound or bougie the pressure, being transmitted through a boring instrument, is to a great extent lost in merely pushing the uterus upward. The first two cases had been under the care of gentlemen who did not recognize the condition of the uterus, and who endeavored by medical means to relieve them, and failed. Family physicians, however, meet disease under many phases and which have been handled in many diverse ways. often present themselves after having abandoned the care of another physician, and he may have been a specialist in the particular department in which the case is classed. Just such cases as are now under consideration frequently come into the hands of the family attendant totally unrelieved; and if there be a reason for this failure, what is that reason?

It is conceded in logic that if our premises are wrong the deductions and conclusions are valueless and must be abandoned. It is to be feared that in the topic under consideration the premises themselves are not so frequently wrong, as that the wrong premises are too frequently invaded. The results in such cases are disastrous to the patient and doctor alike. Do we, when called on to check persistent

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vomiting, attack the stomach invariably as the offending organ? or do we not inquire into the condition of other viscera, the uterus, or liver, and the brain? Do we, when pain is referred to a definite locality, address our remedies to that point alone, or do we not consider upon the possibility of its being reflex in nature and therefore to be combated in a manner appropriate to its cause? That equal care in diagnosing supposed uterine complaints is not always shown, let one or two examples illustrate.

Mr. Blank consulted me three years after marriage as to the health of his wife, with special reference to the possibility of an addition to the family, such an event being mutually desired, but improbable, from information received through professional sources. Willingly submitting to a physical examination, I found the lady apparently in good health, the menstrual function alone excepted. She had always suffered from dysmenorrhæa. Here was ground for conjecture; and by the advice of her family physician she had, a year after marriage, consented to undergo treatment by a specialist, who stated this as the sole obstacle to conception. gentleman, who deservedly holds a prominent reputation, took charge of her case, and for ten months she submitted to a series of operations productive of no good result whatever. She became disheartened and declined further treatment. Learning this much of her history, before going further I inquired into the history of the husband, whose health was apparently good. He admitted, when pressed, several attacks of gonorrhœa in earlier days, and also admitting a sound into his urethra a breakwater was encountered two inches from the meatus, and another four inches farther on. These passed, navigation was uninterrupted. He, of course, had difficulty in urinating, and after proper explanation submitted to dilatation of the strictures. Eleven months after curing the gentleman the imaginary cervical stricture of his estimable wife was thoroughly dilated by a fine boy, who is to-day well and growing nicely.

Mr. Blank No. 2 consulted me as his predecessor had done, and for similar reasons. Mrs. Blank had been under the care of an eminent New York specialist, and underwent a course of treatment very much similar to that in the preceding example. Twelve months of such treatment

had only rendered her hysterical and miserable. Knowing her husband pretty well as a wild fellow-staff-officer during the war, and remembering his devotion to the shrine of Venus in the past, I learned, on inquiry, that he still kept a mistress, and paid her assiduous attention. The simple truth was that his stamina was exhausted to such an extent that neither his wife nor mistress ran any danger of impregnation from any effort of his. Microscopic examination demonstrated the presence of spermatozoa, but they were few and far between, and lazy and indolent as their author. I explained the matter to him, and advised what should be done. comment upon my opinion was short: "I thought the women were always to blame, but that peep-show says it's me! That's too thin! Take something to drink." I assured him the tenuity applied only to himself, and like a good, sensible fellow he gave in. His mistress lost her situation, and he held out faithfully against temptation for a year, as I demanded. I put him on a rigid system of treatment, and his wife was ordered an occasional When authorized to renew marital rites, he was a new man, and his efforts were successful. The spirits of his wife had returned, and the little girl is the picture of her mother.

Mr. Blank No. 3 consulted me as did e others. Mrs. Blank had given up the others. hope, for she had undergone treatment for a real or supposed uterine ailment before becoming my patient, and no improvement was apparent. Her case was somewhat simpler in its nature, as was likely that of her medical attendant, a good old man who had secluded himself in a beautiful village in our State, far removed from the revolutionary theories of our city con-For the relief of a leucorrhœa he had interdicted sexual intercourse for two weeks succeeding menstruation, declaring that with her such relations were unclean, provocative of womb troubles, and causing discharges (what kind not stated) in the male. Her ideas on this subject were firmly fixed from the reverence entertained for her medical adviser, whose duration in practice was truly extensive, even if his physiological ideas were peculiar. I assured her that all trouble could be avoided. and put her upon elixir of calisava internally, and ordered local application of rose-water as a vaginal purifier. After

prosecuting this heroic method for a couple of months, I induced the parties to put into operation what had so terrified them previously, namely, copulation directly after the close of menstruation, without any more serious result than the complete stoppage of that function for a period of twenty-two months, during which interregnum, after nine of the periods had elapsed, "a regular stunner," as the fond father termed it. made its appearance. The rest of the monthly non-appearances were due to the usual nursing of the little phenomenon. Through the peculiar notions of a country physician, this family had been put to great expense in obtaining the services of a gynæcological practitioner from a distance, who to his credit, after treating her for some months, stated his inability to promise any improvement. He was doubtless ignorant of the suggestions of the family attendant, but he should have pushed his inquiries further, and got the full history before they came to reside

in this city.

Mr. Blank No. 4 consulted me with reference to the failure of his wife to make home happy by the presentation of the usual appendix to the honeymoon. had been under the charge of a homeopathic dispenser, and by reason of ingesting numerous kinds of globules, with frequent doses, she promised in time to accumulate a quantity of medicine susceptible of demonstration ocularly (with possibly the aid of a powerful microscope); for he averred that the remedies all went straight into her womb, and would stay there until she conceived. She became alarmed at the quantity required to produce the desired result, and was doubtful of the ability of that organ to hold it, and communicating her fears to a neighbor, who was a patient of mine, she, like a sensible woman, said her doctor was a good doctor (and all good people think that way); so Mrs. Blank came to me. Here, fortunately, the patient had merely been subjected to medical treatment, if such a phrase be applicable; but the would-be doctor persisted in dieting her to the exclusion of everything she really liked, and she was rapidly becoming anæmic. I examined her carefully; she had no displacement nor flexion, the sound entered without difficulty, and no defect was apparent. I approached her husband, and after considerable reluctance he ad-

gation disclosed a bad case of phimosis. The meatus was exceedingly small, and in urinating the stream was projected at a right angle to the long diameter of the penis. Before the escape of any urine the prepuce would swell up like a toy-balloon or a glass-blower's face and neck. The semen was undoubtedly wholly retained until after withdrawal, and the diagnosis in this case was clear. He allowed me to perform circumcision, but he was frightfully anxious that his wife should not discover his defect and charge him with the fault. With, I trust, a pardonable intention to secure domestic harmony. I used the speculum once a week with the lady during her husband's convalescence, at each time causing a little pain purposely, and occasionally drawing a few drops of blood from the cervix with a bistoury, to stain her clothing. On noticing this, she asked if the intention was to get rid of the homoeopathic medicines, and was greatly troubled when I replied that it was not. I allayed her apprehensions by suggesting that, having a long way to travel, by a slight error in direction the globules and dilutions had taken the road to the bladder, and not being of service to that viscus, although as a good neighbor doubtless interested in the general welfare, they had thereby been lost. When her husband had recovered confidence in his ability, I authorized any intercourse that might be desirable, and the result was not only a godsend to the parents, but the baby is an object of interest in the neighborhood, being considered as not so much a natural production as a monument to the development of surgical mechanics. This shows how the public may be deceived, and that "there's humbug in all trades but ours."

In offering these examples, the intention is to suggest that the marked conservatism characterizing other departments of surgery for some time past might, to some extent, be with advantage practised in gynæcological cases. As in almost everything else, fashion has crept into medicine, and it has become exceedingly fashionable to need treatment of this kind, and no difficulty is experienced in obtaining it. It is a fashion, moreover, which has done an immensity of harm, as may be seen by frequent examples in every-day practice. Uterine surgery is conspicuously aggres-The womb is so tolerant of severe sive. mitted having trouble himself. Investi- handling, and so obtuse when subjected to

operative proceedings, as to encourage a style of treatment which would be undertaken much more carefully in other localities. Obscure and chronic disabilities possess special obliquities when examined by gentlemen confining their practice to special subjects, and as the uterus has been charged with being the root of nearly all troubles incident to woman, the gynæcologist requires, beyond all other specialists, great intelligence, thorough education, large experience, and, above everything

else, unbending integrity.

Diseases of the male generative apparatus have as yet attracted attention more particularly to their immediate or primary effect. The capability of these maladies in interfering with procreative ability has not been so carefully weighed as the subiect deserves. The cases narrated have been treated within the last ten years, and many similar ones must come under the notice of the profession, as these came along in ordinary practice, without any effort on my part to get them, or leaning towards the treatment of such complaints. Remembering, then, that there are two sides to a question, let us in considering such cases, before instituting treatment, which in the usual routine is always unpleasant, generally painful, and sometimes dangerous to the female, investigate the problem impartially, and if there is anything wrong which needs remedy, in order to prevent unpleasant reflections in the future, it may be, upon the husband, wife, or the doctor, find out accurately what and "who is to blame."

# THE CAUSES OF ELEPHANTIASIS —A NEW TINEA.

Extract from a letter addressed to Dr. Ruschenberger BY C. A. SIEGFRIED, M.D., U.S.N.

Amoy (China), August 3, 1878.

WE are supposed to prevent the coolie trade in American bottoms and patrol this part of the coast of China. Consequently we oscillate between this port and Swatow. We have not yet seen anything to prevent, and swelter in heat and discomfort for nothing. But, being at Amoy so much, time has made me acquainted with Dr. Patrick Manson, the physician of the community. He, in common with Dr. Lewis, of India, and Dr. Bancroft, of Australia, has discovered and made known the

existence of the filaria sanguinis hominis. Lewis and Bancroft knew of the parasite perhaps a few months before Manson did, but the latter not only discovered it in the blood of numerous patients, but further investigated and labored, and finally made known the complete life of the parasite. He discovered that the common mosquito is the intermediary host of the filaria sanguinis hominis. This parasite lives or has its habitat in the lymphatic vessels, its presence eventually disordering the functions and preventing the flow of the fluid; hence fulness of the distal vessels, hypertrophy and formation of the elephantoid tissue, a low-grade material, lymph scrotum, chyluria, etc., are effects due to it. I am quite convinced of the truth of these observations of Dr. Manson. I have seen young filaria time and time again in the blood of patients in the Chinese hospital here, and have noted any number of elephantoid and similar cases in connection, and thoroughly believe in it as cause and effect.

By this discovery elephantiasis is pre-Where the mosquito flourishes most, and where there exists one case, any number of cases may occur. The mosquito gets the young filaria from man. It undergoes one stage of its life or metamorphosis in the mosquito's stomach. It is discharged with the young on water, and in that medium or by it infection occurs. Without the mosquito the filaria sanguinis hominis could not be matured. The adult worm causes the mischief, such as elephantoid disease, chyluria, and lymph scrotum. Innumerable young in the blood cause a condition similar to ague, and which is treated similarly. The adult female worm only

has been seen.

Dr. Manson has operated upon elephantiasis scroti ninety odd times, with two fatal cases, the tumors being of all sizes and consistence. He operates skilfully, first cutting down and isolating the testes, then clearing the penis, then taking away the mass with the catlin, dissecting up enough skin before doing so to cover the testes. A large sponge is pressed upon the bleeding surface, and the vessels are taken up and ligatured carefully. A drainage-tube in the form of an inverted U is put in, and catgut sutures are employed. Cotton saturated with carbolated oil is the dressing.

Enclosed I send you a pamphlet account of filaria immites,—the parasite inhabiting the heart of dogs in this country. It lives in the heart, and disturbs the action of the organ, and sometimes plugs up the pulmonary vessels. The comparative anatomy of the parasite is fully described in the pamphlet, but the full life of it is still unknown, and Dr. Manson is engaged in seeking it.

I would like to present the pamphlet to the Academy of Natural Sciences of Philadelphia, if you will be kind enough to do it. Dr. Leidy would possibly be interested in the matter. Dr. Manson has taken up many insects in hope of finding the intermediary host, but has not yet succeeded.

In the same pamphlet will be found some account of the original investigations and beginnings of Dr. Manson's work on the filaria sanguinis hominis; also an account of the filaria sanguinolenta, another parasite affecting the dog, but other organs and other tissues than the heart.

I consider these discoveries to be of vast interest and importance. The London Lancet has given some account of Dr. Manson's efforts from time to time. Dr. Cobbold knew the results from him.

A new variety of tinea is also being distinguished by Dr. Manson. It differs from the T. circinata in every particular, clinically and pathologically. The case is from the Straits settlements, and has been known as a ringworm, the local name given it where it occurs, Burmese ringworm, etc. It affects the skin and produces a condition similar to watered silk, one ring within another, and no part healing as the growth progresses. The epidermis is raised up in flakes, rises, and is detached in larger patches than in T. cir-Microscopically, the difference consists in there being few spores, much large-sized and long-pointed mycelium. The whole body becomes gradually affected, no part healing as in circinata. Dr. Tilbury Fox, of London, is to be written to in regard to it, and will present the cases and notes for Dr. Manson.

Leprosy is common in this part of China, and thus far no remedy, in the true sense of the word, is known here. It is not considered contagious, and no measures of precaution are taken beyond avoidance of contact. Marriage of lepers is not prevented; and women affected not infrequently beguile men in the common notion

of transferring it.

I hope you may get some notion from this of the filaria parasite and the important work done by a physician in busy practice with limited means and poor instruments of research.

TRACHEOTOMY AND THYROTOMY FOR REMOVAL OF TUMOR OF THE LARYNX.

BY J. E. GARRETSON, M.D.

DATIENT, a lad from Texas; age, 5

years

History of case.—When one year old, it was remarked that something was wrong with the throat of the boy. What this something was does not seem to have been decided. At the age of two years, interference with articulation by this something was plainly evident. At three years, this interference had become so marked as to suggest the existence of paralysis of the vocal cords. At three years and a half, respiration became involved, the lad breathing with difficulty. At four years, not only was phonation entirely absent, but respiration was an action of such effort as to prove exhaustive of the strength of the patient. At this period the parents of the boy removing to Fort Worth had the advantage of the opinion and services of Dr. J. E. Beale, one of the best known of Southern surgeons, under whose care the lad remained until by the kind recommendation of that gentleman he was transferred to the writer.

Diagnosis by Dr. Beale.—Tumor of larynx, conjoined with incomplete paralysis of vocal

cords.

Laryngoscopic examination.—Throat very small, and of such susceptibility as to render the slightest touch of the mirror provocative of emesis; mucus so abundant as to fill the fauces in a single moment. Patient so timid as to allow of little advantage from the use of artificial illumination.

Depending upon direct light, views caught at rare intervals showed what was apparently an exposed tip of a cauliflower mass thrust from behind or from below the vocal cords. Diagnosis as made by Dr. Beale accepted.

Incident.—A week after arrival of the pa-

Incident.—A week after arrival of the patient in Philadelphia he was taken sick with quotidian intermittent fever. Treatment, six grains of sulphate of quinia exhibited in the intervals. Cure resulted on the third day.

Tracheotomy.—The impossibility of any satisfactory operation per orem decided the nature of the means of cure practised. Upon the 13th of July tracheotomy was performed; a feature a little out of the ordinary way being a thymus gland of such great size as to render its management a matter of some trouble. Pulse, day after operation, one hundred and fifty to the minute; patient restless and feverish. Treatment.—Atmosphere of room kept moist with tincture of calendula atomized. Bromide of potassium in doses of ten grains,

conjoined with three drops of tincture of veratrum viride, administered each three hours. Iced lemonade allowed freely. Fourth day.—Patient interested in his toys; skin moist and reasonably cool; pulse 90. Sixth day.—Patient playing about the room. Free secretion through tracheal tube; atomizing of calendula continued; wound healing kindly about the canula. At the end of second week after operation the boy was in every respect in his usual health.

Thyrotomy.—Thirteen days after the first operation this second was performed. On opening the larynx,—which was done from the crico-thyroid space upward, after the proper exposure had been made,—the tumor, because of the impaction, literally oozed through into the external wound. Examination of the growth in situ exhibited a papilloma of the cauliflower variety, quite the size of an ordinary Lima bean, filling the whole of the right ventricle, from the sacculus of which it had origin, extending from this into the opposite ventricle, which it as well filled with its fringy border. This cauliflower character of the growth explained the lad's ability to continue respiration under the circumstances of so large a growth in the air-passage.

To remove the tumor, an ordinary polypus forceps was used; the pedicle, which in its breadth continued the likeness to the bean, was twisted out, and the seat of it subsequently thoroughly cauterized by means of

the London paste.

The recovery made by the patient was very rapid, the three days and nights of journey required to reach his home being commenced on the twelfth day after the operation.

Before leaving the city the patient could speak in a hoarse whisper, to be heard distinctly at a distance of forty feet. The single sound of the letter C was made in a single in-

stance quite aloud.

The case is now under the professional care of Dr. Beale, who at the proper time will report as to the result. It is assumed that the radical character of extirpation practised insures against the probability of any reappearance of the tumor. There exist no anatomical reasons why an ability to speak shall not come in response to a treatment indicated.

#### NOTE ON SPRAIN-FRACTURES.

BY GEORGE CALLENDER, F.R.S.,

Surgeon to St. Bartholomew's Hospital.

READING the excellent and practical observations by Dr. Pilcher, of Brooklyn, on the treatment of certain injuries to the wrist-joint, I am induced to ask attention more especially to his re-

marks respecting the combination of sprain and fracture, illustrated in his paper by a description of certain injuries to the carpal end of the radius and to the adjacent structures.

Although it was not within my scope to refer in full detail to different varieties of such hurts, yet in a paper which I contributed to the Reports of St. Bartholomew's Hospital, vol. vi. p. 51, I ventured to describe as a distinct class of injuries what I there termed "sprain-fractures." The case of the radial fracture referred to by Dr. Pilcher would fall into this category; but the more common fractures of this kind are those in which a portion, often a mere film, of bone is torn away without rending of the ligamentous structures, the bone giving before the tough fibrous tissue yields. There is no joint to which this hurt more often appertains than that of the ankle. The dissection of recent specimens has enabled me to see how, with the internal lateral ligament more especially, a portion of the corresponding malleolus, often thin as a wafer, is not infrequently detached. I know of no sign by which this hurt can be absolutely diagnosed, for there is no crepitus, nor can the detached film of bone be usually felt. It may, however, be assumed that it is generally present in what are termed severe sprains of the inner ankle.

Now, just as I should hold, with Dr. Pilcher, that simple restraint by plaster and early movements are desirable in the combination of sprain and fracture about the wrist, so I should hold that in the sprainfracture I am referring to, in connection with the ankle, rest and immobility are necessary in order that the broken bone may be duly united. In the case of this hurt it is also necessary that the foot should be kept in position at a right angle with the leg, so that the lateral ligament, with its plate of detached bone, may be accurately re-adapted to the malleolus. If this point is not attended to, the film of bone will rejoin the tibia with a tilt forwards or backwards, and in such cases the ligament will be shortened at one of its ends, with the result of permanently lessening the range of flexion or of extension, as the case may happen to be.

I refer to this illustration for the purpose of asking for greater attention to these "sprain-fractures." They are of common occurrence. They involve various joints.

It is in recognizing the exact details of such injuries, as the author I have named has so well shown in the case of the wrist-joint, that we gain that clinical precision which makes all the difference between loose surgery, uncertain of its results, and exact surgery, which insures good results, or results as little defective as it is possible that they can be.

# NOTES OF HOSPITAL PRACTICE.

# ALLGEMEINES KRANKENHAUS, WIEN.

SERVICE OF DR. ALOIS MONTI.

Notes by C. W. Dulles, M.D.

ECZEMA CAPITIS IMPETIGINOSUM.

N infants and quite small children the pustular or impetiginous form eczema is perhaps the most common. The pustules may be but few and discrete, or they may be many, large, and confluent, until, indeed, the entire scalp is covered with an ulcerated surface. This is most apt to occur in poorly-nourished children. who have little hair, and who live in new, damp, or ill-kept houses. It is not uncommon to find, when eczema has lasted some time, that there is a general infiltration of the lymphatic glands, especially those of the neck; and the brain and nervous system are not rarely in an easily irritable condition. Children with chronic eczema capitis sometimes have convulsions from cedema of the meninges, and die of them.

This should be remembered in treating the disease, and no irritating applications be made. The best plan is to open all the pustules, and apply some simple astringent, such as Goulard's solution, or a powder of oxide of zinc, one part, to four of starch. If the pustules recur, the surface may be washed with a solution of any mild vegetable astringent. Soap should not be used. Then the scalp should be bathed with a solution of corrosive sublimate, one part, to two thousand of water, and anointed with an ointment composed of white precipitate (hydrarg. ammoniat.), one part, to thirty of cold cream.

#### ECZEMA CAPITIS E PEDICULI.

This variety is not so uncommon even among well-to-do people; but it is not always wise to declare it. Even if we see

the animals running about, we shall consult our interests if we keep our own counsel and simply apply the appropriate remedy. This is easy to select. A wash of a one per cent. solution of carbolic acid will do very well, or a pomade containing this or the mild ointment of mercury. The latter should be carefully washed off the next day.

#### ECZEMA CAPITIS RUBRUM.

This is a very serious form of eczema in little children. If chronic, it is dangerous to life. If such cases come with the scalp inflamed, red, infiltrated, hard, and exuding a sero-purulent fluid which is partly dried into crusts, the physician must be very careful and guarded in his prognosis. The occurrence of inflammation and cedema of the meninges is frequent enough to have created a popular impression that such eruptive diseases of the scalp "strike into the brain." Nor should such a possibility be overlooked by the medical man, in order that he may guard against a surprise which would tell against him. The treatment of this form of eczema is, first, to remove crusts and cleanse well the scalp. This must be done gently; no violence should be used. The crusts may be softened and loosened by laying over them a cloth or a cap soaked in lime-water and linseed or olive oil. Time must be given for them to soak up this application, twenty-four hours, if need be,-and then they can be easily removed. The addition of a little carbolic acid to the mixture may be of slight advantage.

After removal of the crusts, a salve should be applied, composed of empl. diachylon comp.\* and cold cream, equal parts, with about one grain or minim of carbolic acid to each two drachms of the mixture. This should be reduced to the consistency of an ointment by the addition of olive oil, q. s.

A more stimulating ointment can be made of balsam of Peru and oxide of zinc, each five parts, with cold cream and unguent. cerussæ (the ung. cerussæ, Austr. Pharmac., is very like our ung. plumbi carbonatis), each twenty parts.

Of course, in the treatment of all forms

<sup>\*</sup> Emp. diachylon comp. (Austr. Pharmac.) is made as follows: Take emp. diachylon simp., 1000 grammes; melt and add ammoniac, powdered, 125 grammes; dissolve in ol. terebinthinæ, 40 grammes; add yellow wax, 150 grammes, and resin, 80 grammes; melt together, strain, and make an emplastrum.

of eczema, the general condition of the little patients must receive careful attention, hygienic rules must be enforced, and the best possible nourishment be secured.

BLENNORRHŒA VULVÆ IN CHILDREN.

The two forms of blennorrhœa, the acute and chronic, are every now and then encountered by the practitioner who has many children under his care. The former is of course the most common. It is usually traumatic. It presents swelling of the labia, reddening of the vulvar mucous membrane, and a more or less profuse purulent discharge. There is often redness or eczema of the skin of the thighs. At the same time the child gives evidence of suffering great pain. There is often marked tenesmus, the urine scalds the parts and is held back as long as possible; consequently, the child has cramps of the bladder, and manifests its suffering by almost unintermitted crying. It may be found, also, that the irritating discharge has been transferred to the eyes, and set up a purulent conjunctivitis.

When a case of blennorrhœa vulvæ is met, it must be taken actively in hand. And, first, absolute rest must be imposed on the little patient, the utmost cleanliness must be enforced, sitz baths must be given. To these a little alum or sugar of lead may be added for their astringent effect. In the intervals a pledget of lint soaked in a one per cent, solution of sulphate of zinc should be inserted between the labia.

Injections should almost never be used, as they may do much more harm than good.

The chronic form of blennorrhoa vulvæ presents a different picture. There is not the evidence of acute inflammation, but a less degree of redness, less discharge, less pain. The child is usually of an anæmic or scrofulous appearance: it may, indeed, have the blennorrhoa as a part of its general scorbutus.

Here the treatment must be directed to the general systemic condition as well as local. Nourishing food and tonics should be ordered, while washings and the application of astringent lotions or ointments should be used on the inflamed parts.

There is a sort of intermediate form of blennorrhea vulvæ coming between the acute and the chronic, which is marked by moderate redness, swelling and irritability of the parts, accompanied by disturbance of the nervous or vaso-motor system. This is sometimes dependent upon parasites, the oxyurus vermicularis especially, which makes its way from the rectum to the vagina, and causes here much more trouble than before. Against them the indication for the employment of a suitable parasiticide is plain.

This form of blennorrhoea is sometimes dependent upon masturbation,—a cause hard to detect and harder to cure. The removal of any source of irritation or abnormal sensibility may go a great way to remedy this trouble. The regulation of the general health and of the mental and moral surroundings (if the child be old enough to understand what it is doing) is of the utmost importance. Local applications should be shunned as much as possible, so that the parts may not be subjected to needless manipulation.

## TRANSLATIONS.

GANGRENE AS A SEQUELA OF TYPHOID FEVER.—Several cases have recently been reported where dry gangrene has attacked patients about recovering from typhoid fever. The Centralbl. f. Chirurgie, Nos. 31 and 33, 1878, gives the following from the Gazette Hebdomadaire. Broquiart describes a case of spontaneous gangrene of the right leg, in a man of 35. In the groin and popliteal space the femoral and popliteal arteries respectively could be felt as hardened cords. The gangrene gradually went on to mummification. Four months later, when the line of demarcation had reached down to the bone, this was divided at the line of the spina tibiæ. The patient recovered. Cauvy's case was that of a boy of 11 years, who was attacked during convalescence with severe pain, with a sensation of coldness and gangrene of the Demarcation was decided by the third day. Amputation at the junction of the middle and lower third of the thigh was performed. The patient recovered. Examination showed the trunk of the anterior and posterior tibials obliterated. Burlureaux refers to an article of Lereboullet on "dry gangrene in the course of typhoid fever," to which we have no reference at hand, and adds to this an observation of his own. A soldier who had suffered for two months with a severe attack of typhoid had reached convalescence, and had already been eight days out of bed,

when one day he felt a severe pain in the right foot shooting up the leg. Three days later the patient limped in walking, the leg was painful on pressure over the calf, and was swollen. No further symptoms appearing, excepting pain on walking, he left the hospital a month later. But a day or two after this the whole leg became swollen, and showed a violaceous tint. The patient was obliged to remain three weeks in bed, but then began to go about again. Six months later the patient returned to his regiment, but was soon put upon the sick-list. The whole right limb was now swollen, but not more discolored than formerly; the calf was painful on pressure. An indurated cord could be felt in the right inguinal region down to the middle of the thigh, and the femoral artery on that side beat less strongly than on the left. The right posterior tibial could not be felt, but the pedic beat more strongly than in the normal condition. Lying, the patient was comfortable, but pain ensued on walking. Finally, a general hypertrophy of the whole foot, leg, and thigh ensued. Burlureaux attributes the affection to a thrombosis of the posterior tibial artery, with gradual obliteration. (This case is interesting, but we fail to see why it is reported as "gangrene."—

PURPURA HÆMORRHAGICA WITHOUT PUR-PURIC PATCHES UPON THE SKIN AND SIM-ULATING TYPHOID FEVER. - Dr. Widal reports the following case (La France Méd., 1878, No. 67): A soldier, 24 years of age, was admitted to the hospital having suffered for six days with cephalalgia, lassitude, and abundant epistaxis. On admission, typhoid stupor, marked prostration, frontal headache, epistaxis. Tongue bright red at the point, and sides very dry; anorexia, constipation. No eruption upon the skin, no nervous symptoms. Heart-sounds normal, some sibilant râles through the chest. T. 38.7° (101.6° F.). The next day the patient showed hæmaturia, epistaxis, abdomen tympanitic, painful on pressure in the iliac fossæ. Constipation. A day or two later, the symptoms persisting, 24 grains of ergot were administered in three doses. On the evening of the fourth day the temperature fell suddenly to 37° (98.6° F.), and the pulse to 60. this there was no more fever. Stimulants and ergot continued. Tamponing the nasal fossa resorted to. Fifth day, stupor

and prostration more marked. Pulse small. 54, no hemorrhagic patches on skin. the sixth day, vomiting, with blood of a brownish color. On the seventh day, everything swallowed was rejected by the stomach, constipation persistent, abdomen swollen and hard, action of heart feeble, slight systolic murmur at base, probably from anæmia, which became more and more profound. Some sibilant râles in the chest. No dulness on percussion. Temp. same, pulse feeble, 48. The patient died on the thirteenth day. Autopsy.-Injection of the meninges. Small hemorrhagic infarctions of the lungs. Heart normal; no clot; liver large and fatty; spleen large but normal. The kidneys were nearly thrice normal size, containing numerous hemorrhagic infarctions. Small intestine markedly injected. Peyer's patches, although injected, presented no alteration. The mucous membrane of the large intestine was puffy and injected, but without ulceration. Dr. Widal points out the resemblances which this case bore to typhoid fever, from which, however, it was evidently so distinct. He regards it as a case of true purpura hæmorrhagica without the purpuric eruption.

ELECTRO-PUNCTURE IN HYDROCELE.—
F. Zamboni (Col. f. Chirurgie, 1878, p. 560; from Giornale Venet. di Scien. Med.) performed electro-puncture for five minutes at a time at two sittings, in a case of voluminous hydrocele. By the second day the effusion had disappeared. Ten days later it reappeared; but one more puncture caused it to disappear permanently. Zamboni thinks that the electricity tones up the vessels and arouses their absorbent power.

CAUSE OF SUDDEN DEATH FROM BURNS. -E. Sonnenburg (Cbl. f. Chirurgie, 1878, p. 579; from Deutsches Zeitschr. f. Chir.) believes that overheating of the blood, with consequent cardiac paralysis, may cause sudden death after burns. When death occurs later, Sonnenburg has found that the blood-pressure regularly diminishes. If, in the case of animals experimented upon, the spinal cord was divided so that nervous transmission was prevented, such animals bore the burns very well. He concludes that in burns an abnormal excitation of the nervous system is produced, whereby, reflexly, a general relaxation of the vascular tone is brought about, the latter being the immediate cause of death.

# PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, OCTOBER 12, 1878.

## EDITORIAL.

JOHNS HOPKINS UNIVERSITY.

THERE is no institution in the United States which is watched, by those who are interested in the advancement of medical science among us, with as much of mingled hope and fear as is Johns Hopkins University. We make, therefore, no apology for bringing it so soon again before our readers in comment upon the recently inaugurated "Preliminary Medical Course."

This course is to extend over three years, as is shown by the following

COURSE OF STUDY.

First Year.

Experimental Physics. (Lectures and Laboratory work.)

Elementary Mechanics.

Chemistry. (Lectures and Laboratory work.) French and German.

Drawing. (Free-hand.)

Second Year.

Chemistry. (Continued.)

General Biology. (Lectures and Laboratory work.)

Elementary Course in Comparative Anatomy and Zoölogy. (Lectures and Dissections.) Elementary Course in Physiology and Histology. (Lectures and Laboratory work.) Human Osteology and the Anatomy of the Ligaments and Joints.

Logic.

Third Year.

Human Anatomy.

Advanced Course in Physiology and Histology.

Elements of Embryology.

Psychology.

It is not necessary for us to describe minutely the way in which this course is to be carried out. The laboratory preparations, the arrangement of studies, and all the other details, are fully described in the official circular, which, we presume, may be obtained by application to President Gilman, or to the University. In their fulness, completeness, and fitness they appear to be almost everything that can be desired. We can but commend them most highly.

The important general consideration which at once naturally engages the attention of a friend of the institution, not immediately connected with it, is as to the scope of this so-called preliminary medical course, and especially as to its relation with the full medical course, which is, we trust, to be organized in a few years. Unfortunately, the circular does not throw much light upon this matter, the whole information vouchsafed being contained in the following extract:

The Johns Hopkins University will organize, at the commencement of the session 1878-79, a course of instruction preliminary to the study of medicine. This course will have the object of giving the student a liberal education, but one rather scientific than literary, and including a thorough knowledge of the structure and functions of the human body in health. At its completion, the student will be prepared to enter at once upon medical studies proper,—i.e., the phenomena of disease, and its origin, nature, prevention, and cure.

The course proposed will extend over three years; but students who, on entry, pass a satisfactory examination in the subjects prescribed for the first year's study, will be allowed to enter upon the second year's studies at once.

We have no means of knowing the intention of the University authorities, and our deductions may be erroneous. It will be seen, however, that the student, at the close of this course, will be fully prepared to enter upon especial medical studies,—indeed, will have completed the study of all the branches of science fundamental to

the proper medical science and art. Three years being abundant time to allow for the acquiring of proper medical knowledge, we presume that it is intended to supplement the present course with one of two or three years.

This presumption is greatly increased by the evident fact that if a complete medical course distinct from this "Preliminary Course" is to be instituted, a duplication of very much of the Preliminary Course will be required. It is possible that under the present system it is hoped to reach three classes of pupils: first, those who desire education in chemistry, physical and biological science, without a knowledge of medicine, and who will take the preliminary medical course only; second, those who desire both a general education specially fitted for the physician, and also a medical education, and who will take both courses; third, those who, conceiving that they have had sufficient general instruction. enter the second year of the preliminary course for the purpose of professional training only.

It must be acknowledged that this plan is ingenious and seems to meet various wants. It is, however, so common an experience that a plan which compasses various ends fails to attain any one most fully, that the question naturally arises as to the possible failure in this way of that adopted by the Johns Hopkins University.

The requirements for admission to the preliminary medical course are simply a knowledge of Elementary Mathematics, Arithmetic, Algebra, and three books of Euclid, or an equivalent amount of Geometry, acquaintance with Latin Grammar, especially accidence, and the ability to translate passages from the first four books of Cæsar, De Bello Gallico, and of the sixth book of the Æneid.

A bright boy could be readily prepared for passing these preliminary examinations by the time he was fourteen or at most fifteen years of age, which would give him his medical degree at twenty, fully two years too early.

Again, any boy carrying out fully and accurately the course prescribed by Johns Hopkins University would go forth to his life-work not fully equipped to do the best possible with his natural powers for himself and his fellows. Personal experience. close contact with many hundreds of professional pupils, careful watching and study of the careers of men who have overcome. more or less imperfectly, defects of early training and forced their way into the front ranks of the profession, have convinced us of the value of a moderate knowledge of Greek, and the inestimable value of a thorough training in the higher mathematics.

He who complies strictly with the Johns Hopkins plan will be lacking not only in these things, but also in a knowledge of geography, history, logic, rhetoric, including the art both of speaking and writing, and of many other things which are usually considered essential to a man of polite education.

The person who is educated from boyhood for the medical profession in the course prescribed in the catalogue of our own University will probably, in the training he has received, be superior to him who has followed the Johns Hopkins plan.

According to their circular, the authorities of Johns Hopkins are considering the propriety of giving the degree of B.M. to the person who has successfully completed the course of Preliminary Medical Instruction. We sincerely trust that they will finally decide not to do so. The only gain is a possible but not probable increase of scholars by pandering to the craze for degrees. The objections are manifold. We are exceeding our allotted space, and have room for only two of them. It is so absurd to give a degree of Bachelor of Medicine to a man who has not studied medicine at all that the institution which does so injures all its degrees. It is harmful to the people to grant such a title, because it gives opportunity to men without knowledge of practical medicine to practise under the ægis of a mighty name. No publicity can force the people to understand the respective positions of B.M. and M.D.

The standard of the medical department of Johns Hopkins University seems, on the whole, to be rather lower than that of an ordinary medical school of Great Britain, France, or Germany; and this is all! where such magnificent opportunity was afforded of making a medical institution which should be a beacon for the world of medicine, a great centre of medical thought, and of the highest influence!

The failure of the authorities of Johns Hopkins is all the more disheartening, since they are earnest men, desiring to do the right thing, and apparently had an abundance of light. Dr. Billings,\* in his very able course of lectures, pointed out clearly and plainly the greatness of our need, the power of the institute to meet it, and the general method in which this could be done. The various details of his plan are of course subject for discussion, but the value of the central idea is, to our thinking, beyond all dispute. It is that the students of the University should be highly educated before entering upon their scientific and medical studies, and that by reason of age and training they, after the first or second year of their professional curriculum, should be able to take part in that investigation of the science and art of medicine which was to form the raison d'être of the Medical Department of the Johns Hopkins University. Under such system the graduates of the institution might have held the proudest diploma in the world.

Let us hope that practical results will reveal to the trustees the mistake we think they have made. It may be that their present course will not attract enough to overcome its length and expense, and that men who would submit to anything for the highest opportunities will pass by the present arrangements.

#### LEADING ARTICLES.

## SALICYLIC ACID.

No. 2.

EAVING out of sight the surgical and disinfectant uses of the drug in question, medicine has as yet found only three purposes for which to employ the remedy: as an antipyretic, as an antiperiodic, as a specific in rheumatic and allied affections. Enough has already been said to establish the antipyretic action of salicylic acid.

The question as to whether good is achieved in fevers by its use is, however, entirely separate from that as to its power of reducing temperature. It is certainly possible for it to lower the fever-heat, and yet to do far more harm than good; and the evidence at hand does not yet seem sufficient to answer the present inquiry. In the Semenoffschen Military Hospital, from January, 1875, to the middle of September, 1875, two hundred and eleven cases of typhoid (?) fever were treated without salicylic acid, and from the last date to March, 1876, one hundred and sixty cases with the acid. The mortality in the first period was 14.7 per cent., in the last 19.4 per cent. (Schroeder, Deutsches Archiv für Klin. Med., xviii. 516.) In the garrison of Stargard, in 1872, thirty-nine cases received mild cold-water treatment; in 1874, sixty three cases, cold-water treatment energetically; in 1875, thirty-five cases, the salicylic acid treatment; the mortality being, respectively, 30.7, 9.5, 8.5 per cent., and the average length of treatment 66.6, 53.3, and 37 days. (Jahn, *Ibid.*, p. 451.) These statistics are all that are at command, and certainly leave the question at issue sub judice.

The antiperiodic action of the drug does not appear to be such as to entitle it to confidence. It is true that Senator in nine cases had but one failure (*Berlin. Klin. Woch.*,

<sup>\*</sup> We would ask any of our readers who may think this editorial overstates the case to send for the pamphlet of Dr. Billings (Extracts from Lectures delivered before the Johns Hopkins University, Baltimore, 1877-78) and the circular spoken of in the text, and compare what might have been done and what has been done.

1875); but the general drift of experience coincides, we think, with that of Helley, who found salicylic acid to fail in obstinate malarial cases, and to require longer time to cure than does quinine in mild cases.

The antipyretic properties of salicylic acid early led to its being used in rheumatism, and in 1876 (Berlin, Klin, Wochen... xiii.) Stricker first announced that it was an exceedingly valuable remedy in this disease, usually, when given in hourly doses of from seven to fifteen grains, causing a disappearance of the symptoms in a period not exceeding forty-eight hours. The conclusions of Stricker have been substantially confirmed by numerous observers in Germany, France, England, and this country. Although some cases of rheumatism do not seem to yield to the drug, in the great majority of instances improvement sets in within twenty-four hours and is rapidly followed by disappearance of the pain and fever. The dangers of cardiac and cerebral complications are certainly lessened, but not altogether done away with.\* In excessive rheumatic hyperpyrexia it cannot be depended upon to the exclusion of the cold bath. Jaccoud states (*Progrès Méd.*, 1877, 528, 745) that he has found it of great service in chronic rheumatism; but the general testimony appears to show that it is much less certain in the chronic than in the acute disorder. Taccoud also states that in acute gout it acts with extraordinary effect. As in cases of habitual gout the kidneys are often seriously affected, the urine should always be examined, and if it be found albuminous the remedy be withheld. Various mishaps (gangrene, Bull. de Thérap., xciii. p. 324; necrosis, British Medical Journal, 1876, 2, 776, 820, 843) have been ascribed to the use of the acid in rheumatism, but these were in all probability accidental complications of the disorder. Dr. H. Weber has seen it act most happily in gonorrhœal rheumatism (Bull. de Thérap., xciii. 328).

In regard to the method of administration of the drug not much need be said here. Owing to the insolubility and irritant action of salicylic acid on the mucous membrane of the mouth, some difficulties beset its internal administration, and various preparations of it have been suggested. As a knowledge of its solubilities is essential to the making of preparations of it, the following data of solutions used by Mr. Callender are worthy of place here: Phosphate of sodium, three parts; salicylic acid, one part: water, fifty parts.—Salicylic acid, one part; olive oil, forty-nine parts.—Salicylic acid, one part; bicarbonate of sodium, half part; water, one hundred parts.—Salicylic acid, ten parts; borax, eighteen parts: water, one hundred parts. (London Clin. Soc. Trans., ix. p. 10.) A twenty-five per cent. solution, which will bear dilution with water or alcohol, may be prepared according to the following formula:

> R Acid. salicyl., 3ii; Sodii biborat., 3i; Glycerinæ, q. s.

Mix the acid and borax with four fluidounces of glycerin; heat gently until dissolved; then add enough glycerin to make one fluidounce.

I do not think, however, that any solution of the acid should be selected for internal use. It is much better to employ the soda salt, which is soluble, or to give the acid in *cachet de pain*.

# CORRESPONDENCE.

#### LONDON LETTER.

LIVELY discussion has gone on in the Times on the subject of physicians' fees, and, as a natural consequence, the matter has drawn forth leaders in other lay papers as well as in medical periodicals. It certainly is time something should be done in this matter. The time-honored guinea was a great deal too much once, if it is a sufficient fee now; and if a fair honorarium now, it was profusely generous in the time of Queen Anne, when we consider how much more it would purchase then than it can now. Again, too, the progress of medical science is such that even an ordinary physician, who has in no way distinguished himself, can now examine a case in a very different manner from that possible in the time of the illustrious Radcliffe; and, with an increasing knowledge of the action of remedies, we prescribe with a certainty unattainable in those days. Physical examination has been brought to a state of perfection undreamt of then, and the exact condition of the viscera can now be ascertained to an extent then never supposed to be feasible. But, on the other hand, no amount

<sup>\*</sup> Consult for this point Jaccoud, Le Progrès Méd., 1877, p. 588; Green, London Lancet, November 11, 1877; Roe, London Lancet, 1877, 2, p. 905; Jacobs, ibid., 655; Brown, Boston Med. and Surg. Journ., February 8, 1877. E. Buss was probably the first one to make trial of this remedy.

of mere education and capacity to pass examinations, or even to instruct others to pass examinations, will endow a man with the capacity to take in those points of a case which lie beyond, and are not included in, the physical examination; and probably Radcliffe could appraise the different points in a case of dropsy, taking all in all, as well as, or even better than, a modern physician, who, with greater capacity to ascertain what is taught by the physical signs, yet does not possess in so high a degree that insight into the less obvious data which so often outweighs the physical signs in their diagnostic and prognostic information. The careful education of the physician of the present day, and his information derived from the works of others, even when no original work testifies to powers of observation or of thought on his own part, enable him to be of much more avail than even a much cleverer man could be a century ago. The information he can furnish to the patient about his mode of life, his dietary, the importance of hygienic arrangements, the effects of climate and of locality, to say nothing of the medicinal part of the treatment of a case, is worth far more than a guinea, if that sum was a fair equivalent for the advice tendered in the days of the early Georges. How does it happen then, it may be asked, that, while the remuneration of every other form of skilled advice has kept pace with the times, the physician's fee has stood stationary while medical knowledge has made such advances? There are several factors to be carefully considered before a satisfactory answer can be given to this question. In the first place, as long as well-known leaders of the profession are willing to take the guinea for their matured advice and the product of a long experience, it is almost futile for the junior men to raise their fee. A struggling man, comparatively young, cannot ask more than a man who has won a title. Consequently, some concerted movement on the part of the leaders of the profession is eminently desirable. If the minimum fee of the leading consultants was known to be two guineas for the first consultation and one after, this would soon become a recognized practice, and the custom would extend to the less eminent physicians. But if Dr. Genial Suavity, the fashionable physician, and Sir Alexander MacFungus, the famous surgeon, will still accept the old-fashioned fee, and give their advice therefor, it is next to impossible for their juniors to get more for their advice. Then, again, the profession is handi-capped in this way: there are a number of consulting physicians, by right of examina-tions passed and appointments held, who are not such from any natural fitness. They have means, family connections, and school and college friends, with some private income, which will keep them, but which may be supplemented by some other form of income with advantage. These men usually do not enter upon their medical studies so young as the ordinary student. They bring a more matured mind to bear on their studies, and, consequently, look comparatively cleverer than they really are. They have a more extended worldly knowledge, are very careful in their conduct, and they make no juvenile mistakes to be lived down. They are pleasant and gen-tlemanly, and do work for their seniors, who work in return for them to put them on the staff of their hospital. Then they have the tremendous advantage of having means: their friends can afford to be friendly "right away," without having to wait to see whether they are going to be able to breast the current successfully or not. A hospital staff does not like to take up a poor man, who, after arduous, even agonizing, struggles, has to terminate his existence in a coffee-shop, as occurred in a most painful case some little time ago. A prudent, cautious fellow, with private means, may safely be backed without fear of collapse; and then, too, he has the further advantage of not being over-heavily weighted intellectually, and thus is not likely to get an undue share of the consulting work which constantly comes to the members of the staff of a hospital from its whilom students. He is a safe man. Such men know their own value and their motives for entering the profession, and they are quite content to accept the guinea fee. They know their chances of success well enough: there is no prospect of their ever attaining to a higher fee, and, consequently, they undersell These are the men who are found to be attending Lord Bareacres at the rate of three visits for a guinea. Having systematically undersold their true competitors, they do not hesitate to poach upon the better-class general practitioner, who naturally resents this action on the part of what ought to be a genuine consultant. There is too much truth in this apparently bitter statement, and those who have followed a recent discussion in the British Medical Journal know that it is too well founded. So long as a certain, even a considerable, proportion of what ought to be true consultants will do such things the profession cannot rise in public estimation, but must gradually sink lower. It is very hard for poorer and more energetic men to make headway when handicapped so heavily by their own brethren.

This is one of the great causes of specialism. An energetic man who has not these social advantages, and who sees no prospect of being gradually worked into practice under the wing of a well-disposed senior, must cut out a path for himself. He reads papers of unquestionable ability before Societies. Editors gladly insert his contributions, and publishers take his works on their merits; and so he gets before the public, medical and lay, in time. Such men are not heard discussing the guinea question: it does not interest them

much. So far as they are concerned, they have left the matter of the guinea behind them. It is reserved for their hospital patients, and the friends of these patients, for deserving and necessitous persons who cannot well pay more. But for the bulk of their practice two guineas are usually tendered at the first consultation, without anything being said. There is a great deal of human nature about patients; and they are willing enough to pay for a good article when they think they have got it. It may be safely asserted that if the physician takes pains, shows that he knows his work, and sincerely does his best for his patients, they will appreciate his advice in a tangible form. Patients who have seen several consultants can soon appraise the value of the advice tendered and estimate it at its real pecuniary equivalent as regards amount of fee. If the physician has a genuine article to offer, his patients will soon acquire the habit of giving him two guineas and not one, or, if his practice lie among the poorer members of the aristocracy, the sovereign without the shilling. It may be truthfully asserted that, in the main, it lies with a man's self what fee is tendered to him for his advice. Certainly nothing can be more irrational than the present method of remunerating the physician: the man who does little or no good to his patient secures a number of fees; while the physician who does good gets only one or two. It may be urged that a sufficient amount is spent among the profession for the management of the case; but then the bulk of the money gets into the wrong pockets.

Would it not be well, in instances where the case must be gone thoroughly into (not merely when the patient is present, but occupies a good deal of the physician's time and thought when alone), for the consultation to assume the shape it does with a legal consultant or a consulting engineer? There the time and the thought given to the case are met in a more rational manner, and the fee tendered may extend from ten to fifty guineas, or even more. In cases by no means unfrequent, where a carefully weighed opinion is sought by a patient who is going to enter upon a new business, or who is entertaining the project of emigrating, or of marrying again, or indeed any case where material interests are involved, and where long attentive thought is required, and several interviews and examinations are essential to the formation of such opinion, an honorarium in a lump sum seems indicated. Thirty guineas in such cases would never be grudged for a counsel's opinion in reference to a sum of money to be invested, or a piece of property: why then should not it be tendered for an opinion which involves the life of the person, and of course includes his tenure of his possessions? This would be more likely to be of real service to the patient and more equitable to the profession than the plan of spend-

ing or squandering the sum among several physicians, perhaps getting little valid counsel from any, and certainly putting a large proportion of the sum where it was not earned, and for which no corresponding equivalent has been received. This plan would lead to more carefully weighed and more matured opinions than are feasible under the present system; it would cause the physician to study his cases more attentively, and it would bring out the physician's real value more accurately than the present system can. With the present plan a suave and specious manner, a wily brain, and a knowledge of human nature, chiefly of its weaknesses, are more successful than a solid knowledge of his profession to a medical consultant. The suggested plan would be a much fairer test both for patient and physician, and the actual value of the opinion given would be more clearly apparent. Under it the really good man would be less distanced by his showy neighbor, and his sterling worth as a consultant would have a better chance of being appreciated. Even if such a radical reform is impracticable at present, there seems no reason why the leaders of the profession should not agree to take three guineas for the first consultation and two guineas for succeeding ones. By so doing if they lost a certain portion of their patients they would make the same amount of money, and they would have more time for each patient: this would be better both for patient and physician.

At this time when "everybody who is anybody" is out of town and mainly at the seaside, the question of swimming as a healthful exercise and a valuable accomplishment naturally suggests itself. A recent terrible accident on the Thames has directed attention to the value of swimming. Probably for boys there are already almost all the requisite facilities offered in towns, and in the country and at the seaside there are the pool and the shore. But for girls, as yet, no proper facilities exist, or, if so, only to a limited degree; and yet no more healthful exercise can be pointed out. Lawn tennis on land, and swimming as much as boating on the water, should be the recreation of the girl who wishes to attain a fine, well-developed physique. The importance of goodly corporeal development is now being appreciated, and athletics for girls are preferred to the old wooden-boned corsets and backboards. The spine will grow straighter as well as suppler by good development, especially of the muscles, than by those rude surgical appliances. The day of the prim conventional miss who sat uncomplaining in a straight-backed chair and achieved marvels of skill with her needle, and who cried a little over "Clarissa Harlowe," has passed away; and, fortunately for girls, on this side of the Atlantic at least, the day of physical education has dawned, and hysteria, religious melancholia, headaches, and fits of lowspiritedness will not have the universal sway they have had. The girl who is now active is no longer regarded as a "tom boy," but is rather looked up to by her schoolfellows. We may be passing through a social phase of devotion to athletics, and letting sports and muscular exercises attain an unjustifiable importance in our educational arrangements for boys, but for girls there is certainly as yet no excess. Swimming is one of the healthiest and best of exercises, if not indulged in too much. All the muscles are thrown into action, and the chest is developed; the lower extremities are untrammelled by heavy skirts, and the pelvic organs are free from the compression of their attachments. As a hygienic exercise swimming has much to be said for it.

But there are several points to be attended to, else swimming may be injurious. Nothing can be more pleasant than to see a lot of healthful, active girls, going off or returning from their early morning bath, with bloom on their cheeks and vigor in their movements; but for less strong and for delicate girls this morning exercise may be too taxing; and it is desirable that they avoid the water until after the body has received a meal and the food taken been digested. Noon is the time of bathing for delicate organisms. Then as to the duration of the bath: five minutes is sufficient for mere bathing; a longer time is apt to produce a chill. Of course, where active movements are made, as in swimming, a longer stay in the water is permissible, and muscular movement produces heat, and so the body-temperature is maintained in the water, which is a rapid conductor of heat. With an active swimmer a quarter of an hour in the water may not be too much, and with strong swimmers even a longer time may be permissible. But too long immersion is always to be avoided. If the bather feel at all chilly, a brisk walk will soon bring up the body-heat. Repeated bathing in one day is to be condemned as unsuited for girls, and as scarcely desirable for boys.

Then there are recurring periods with girls when the bath should be given up entirely. Even the warm bath at these times is apt to produce headache and discomfort, even when there is no arrest of the flux produced. With these precautions, swimming is a safe and most desirable exercise and accomplishment for girls and women. An American lady was on board the Princess Alice when struck by the Bywell Castle on the Thames, and swam, or partly swam and partly was borne by the tide, a distance of two miles before she was picked up, and unfortunately died a week afterwards, never having recovered from the shock and exhaustion. This case shows that even under the terrible emergency of such a catastrophe the art of swimming may be of great avail to those women who possess a knowledge thereof. But it is not for its utility in emergencies that swimming is desirable as an accomplishment for girls, but for its value as a healthful exercise and practice.

I. MILNER FOTHERGILL.

#### PROCEEDINGS OF SOCIETIES.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

A CONVERSATIONAL meeting was held at the hall of the College of Physicians, Philadelphia, September 11, 1878, Dr. J. Solis Cohen, Vice-President of the Association, in the chair.

The death of Dr. Washington L. Atlee having been announced by the Secretary, Dr. Henry Leaman, the following remarks were

made by Prof. Gross:

Mr. President and Gentlemen:-We all know the object of this meeting. It is to do honor to the memory of a great and good man, and to express our sympathy for his family in this hour of their deep affliction, Dr. Washington L. Atlee died at his residence, after a lingering illness, on Saturday evening last, at the age of 70 years, like a ripe shock of corn. The cause of his death was malignant disease of the left kidney. under symptoms of which he had labored for a number of months, during the last three of which he was confined to his chamber and much of the time to his bed. His illness was attended with great suffering, which he bore with the philosophy of a martyr and the patience and resignation of the Christian gentleman. To the last he retained his intellectual faculties unimpaired by the ravages of his physical ailments, and exhibited that courage and disregard of death which one might expect in a great physician who had so often faced the fell destroyer in his own practice, under the most trying circumstances. As his malady progressed, he knew that his end was near at hand, and he therefore, like a wise man, set his house in order, patiently biding his time to be released from his suffer-

lt was my good fortune to become acquainted with Dr. Atlee at an early period of my life. In 1826 and '27 we were fellowstudents in the office of Prof. George McClellan, the founder of the Jefferson Medical College. He formed one of a class of fourteen or fifteen pupils, most of them remarkable for their intellectual powers, refinement, and high promise. Of that band—of whom not more than three remain—Atlee was one of the most conspicuous; tall, erect, and handsome in person, he was remarkably neat in his appearance, and possessed of an amount of industry, intelligence, and ambition which foreshadowed his future success. Young as he was, it was apparent that he had a highly-inquisitive mind, that he was con-

stantly in search of new truths, and that he was determined to attain to distinction in his profession. Graduating from the Jefferson Medical College in 1829, he settled almost immediately after at Lancaster, his native city, and soon acquired a respectable and influential practice, spending his leisure in hard study, in botanical researches.—for which he had a great fancy,-in delivering courses of popular lectures, including chemistry, and in assisting in founding various useful local societies and institutions. In 1844 he was appointed Professor of Chemistry in the medical department of the Pennsylvania College of Philadelphia, a situation which he retained until 1852, when, his practice becoming onerous, he was obliged to resign it. Engaged for a number of years in general practice, he gradually, as he advanced in years, devoted himself more and more to the duties of a gynæcologist, in which he was destined to attain a high and commanding position, exceeded by no one on this continent. He became, as is well known, especially distinguished as an ovariotomist. At the time of his death his operations had reached nearly four hundred. As a worker in his profession, he was ever earnest and among the foremost promoters of medical science and medical education. He played an active part in the organization of the American Medical Association, of the Pennsylvania State Medical Society, and of the Philadelphia County Medical Society, of the former of which he was at one time vice-president, and of the latter two president. As a writer he was clear and forcible, always expressing himself in strong, well-chosen English adapted to the dullest comprehension. His work on the Diagnosis of Ovarian Tumors will occupy a permanent place in American medical literature. His contributions to the periodical press were numerous and eminently creditable, often exhaustive, and generally suggestive of novel views of pathology and practice. One of his last contributions was an elaborate paper on fibroid tumors of the uterus, read before the Gynæcological Section of the International Medical Congress in this city in 1876. With the knife he was, in his particular line, facile princeps. He appreciated the aphorism of Desault, that simplicity is the perfection of an operation. He rarely used more than one scalpel, one bistoury, one pair of forceps, one pair of scissors, and one needle. He had a just horror of display. The duties having been duly assigned to his assistants, everything proceeded as silently as possible, with the regularity of clockwork. Always selfpossessed, his eye never quailed, his hand never trembled.

Who will say that such a man's life was in vain? I am not informed of his success as an ovariotomist, but if it be assumed that it was of an average character, and that the number of his cases reached nearly four hundred,

it must be concluded that he secured to suffering woman an aggregate life of at least two thousand years.

In his manners Dr. Atlee was gentle and tender as a woman; in his conduct, upright, pure, and conscientious; in his convictions, firm and determined, but never arrogant or haughty; in his friendship, sincere and cordial; in his intercourse with his professional brethren and the world at large, considerate and urbane. Despising the tricks of the charlatan, he cherished the highest respect for medical ethics, and the warmest attachment for his profession, of which he was one of the brightest exemplars and one of the most illustrious, zealous, and devoted members. It will not be trenching upon the sanctities of private life to add that Dr. Atlee was a most loving husband and father,—the idol of his family and of a large circle of appeciative friends.

Death during the last fourteen months has been more than ordinarily busy in the higher walks of our profession. Commencing with Prof. N. R. Smith, the eminent surgeon, of Baltimore, who died on the 3d of July, 1877, he swept away, in rapid succession, Alpheus B. Crosby, of Hanover, New Hampshire, Edward H. Clarke, of Boston, Edmund Randolph Peaslee, of New York, Paul Fitzsimons Eve, of Nashville, Lunsford Pitts Yandell, of Louisville, and last, but not least, our honored friend and confrère, Washington Light Atlee. What a harvest there is here! All men of brains, of great usefulness, and of national reputation, called hence in this comparatively short space of time!

"Take them, O Death, and bear away
Whatever thou canst call thine own;
Thine image, stamped upon this clay,
Doth give thee that,—but that alone."

I am indebted to Dr. Drysdale, Dr. Atlee's son-in-law, for the following account of the post-mortem examination, which cannot fail

to interest you:

"In April, 1876, Dr. Atlee performed operations in three different cities on three succeeding days, travelling for this purpose three nights in succession. One of the patients on whom he operated was suffering from cancer of the uterus. He returned home feeling greatly prostrated, and at once took to his bed. I found him with a low fever, tympanitic abdomen, and tenderness in the left iliac region,-in fact, having most of the symptoms of a patient in the second week of typhoid fever. He recovered from this in about ten days, but from that time his health failed, he lost color, and emaciated rapidly. Last February a small lump was found projecting below the border of the ribs on the left side, This increased rapidly, and by June extended from the nipple to the anterior superior spinous process of the ilium. It consisted of a comparatively soft mass above, terminating below in hard nodules. It was supposed to be a

malignant disease of the spleen. The liver was also greatly enlarged, its lower border touching the anterior superior spinous process of the ilium of the right side.

"In the latter part of June the tumor slowly diminished in size, and continued to contract until nothing could be felt of it except the hard nodules just below the ribs.

"In the autopsy, made on the 8th instant, the spleen was found enlarged to about twice its usual size, but was healthy in structure. It was located more anteriorly than normal, and just under it was a large tumor, which a careful examination proved to be the left kidney. It reached from the diaphragm above to the promontory of the sacrum below, and was firmly adherent to the parts beneath it, incorporating the aorta and other vessels in its mass. Its estimated weight was between two and three pounds.

"It proved to be a medullary cancer of the left kidney, its upper border being hard, while the remainder of the mass was cerebriform.

"In its early stage it evidently pressed on the vessels of the spleen and liver, producing congestion of these organs, which in the last two months was relieved by the softening of the mass. The spleen, being thus greatly enlarged and covering the diseased kidney like a cushion, led us into the error of supposing it the organ at fault. The urine was carefully and frequently examined in all stages of the disease, but nothing abnormal was ever found in it. The right kidney was rather larger than normal, and contained in its cortical substance a number of cysts, some of them as large as a nutmeg and filled with a yellow-ish fluid. The liver was healthy, but the cystic duct contained a calculus of large size, which completely obstructed it. The duct was fully an inch in diameter, and, like the gall-bladder, was filled with a colorless, watery fluid which was slightly opalescent. Under the microscope this fluid was seen to contain groups of pavement epithelial cells of small size, which had undergone fatty degeneration, and large quantities of crystals of cholesterin. When boiled it was found to be slightly albuminous.

"The stomach was distended, but healthy, except a slight thickening about the pyloric

"The heart contained, in the right ventricle, and firmly attached to its right wall and to the columnæ carneæ, a growth of a light-fawn color and firm consistence, about the size of a large English walnut. It was situated just below the tricuspid valve. The mitral valves were thickened, but the aortic valves were healthy.'

Mr. President, I beg leave to offer the fol-

lowing resolutions:

Whereas, The Philadelphia County Medical Society have heard with profound sorrow of the death of their late fellow-member, Dr. Washington L. Atlee, one of the founders of the Society and at one time its president; and whereas, it is proper that we should give expression to our feelings upon an occasion so solemn and impressive as this: there-

Resolved. That we deeply lament the demise of a man who for nearly half a century was a devoted and faithful student of his profession,—a profession which he adorned by his private virtues and illustrated by his successful practice as a physician, an obstetri-

cian, and a gynæcologist.

Resolved, That Dr. Atlee, as one of the pioneers in ovariotomy in this country,—an operation which he performed nearly four hundred times, - rendered most important service in recalling, as he did, the attention of the profession to the practicability and value of that operation and in placing it upon a firm and permanent basis as one of the established processes of the healing art, at the same time that, by his private labors, he conferred immense benefit upon suffering women by increasing their comfort and prolonging their lives.

Resolved, That, as an author and an able thinker, his contributions to gynæcology, and other branches of medicine, have shed important light upon the nature and treatment of female diseases and upon the opera-

tions necessary for their cure.

Resolved. That the memory of a physician who accomplished so much for the good of his race should be cherished by his professional brethren, as well as the public, of which he was so valuable a member, and that his example as a high-toned, honorable, and Christian gentleman is worthy of the imitation of all young men engaged in the study and practice of medicine.

Resolved, That we tender to the family of

our deceased brother our heartfelt sympathy in their bereavement, and that a copy of these proceedings, signed by the president and secretary of this meeting, be sent to them, and also to the medical and secular presses of the city, with a request that they will be kind

enough to publish them.

These resolutions were unanimously

adopted.

The paper of the evening, by Dr. W. R. D. Blackwood, was read, and the usual vote of thanks was passed. No discussion occurring, Dr. Dunmire was called to the chair, while Dr. J. Solis Cohen exhibited-1. A mouthdistender for operations within the mouth, which had been made at his suggestion, and which he had used on several occasions within the past five or six years with great satisfaction. It consists of two movable wire frames for upper and lower jaw respectively, retained in position by extensions passing behind each alveolar ridge, these extensions being wrapped with adhesive plaster before an operation, so as to diminish the

tension on the parts. The separation of the jaws is effected by a set-screw attached beneath the lower frame in the middle line, so as to be entirely out of the oral opening. The lower frame is provided with a movable solid tongue-depresser for attachment when it is required to keep the tongue out of the way of instruments. Dr. Cohen stated that he had found this instrument more serviceable than any other of the kind he had seen in the stores. 2. An adaptation of a flexible probe, made at his suggestion, as a guide for the posterior nasal tampon. A blunt-pointed flexible silver or copper wire is covered with polished rubber coating, to give it enough body to prevent kinking without interfering with its flexibility, and terminates in an ordinary, eyed, probe extremity, made of flexible silver, for which a simple loop of wire would answer as a substitute. The eye of the probe being threaded, the blunt end is passed along the floor of the nares, round the palate, and into the mouth, whence it is drawn forward, dragging the thread after it, and detached from the thread, to which the tampon is then secured in the usual manner.

Its advantage over Bellocq's canula is its simplicity and greater ease of use,—there being no occasion to draw the instrument back through the nasal passage,—and its slight bulk, which enables it to be used on the youngest subject. Over the simple loop of wire, often used for the same purpose, it possesses the advantage of irritating the parts much less in its passage, and that of not passing a second time over the floor of the nose

in its withdrawal. 3. A tracheotomy-tube, in which the projecting wire hinge-like handles of the inner tube are dispensed with by prolonging the inner tube beyond the plate by which it is secured to the outer tube in the usual manner, and finishing it with an annular rim or milled edge, as in the German rubber tubes and the flexible inner tube of Durham. It differs from the German tube in being part of the inner tube and not movable upon it, so that there is no danger whatever of a detachment of the inner tube and its dropping down the trachea,—an accident of occasional occurrence with the rubber tube, and even with the silver tube when merely soldered to the plate,—and from Durham's, in preserving the ordinary plate for secure attachment by button against the outer tube, and thus prevented from slipping out in the movements of the patient. Dr. Cohen was led to have this alteration made on account of the difficulty of keeping the external portion of the ordinary inner tube scrupulously clean, from the many points the wire projections offered for the adherence of viscid mucus and the like, and the trouble

required to cleanse it properly even when re-

moved from the patient.

FRANK WOODBURY, M.D., Reporting Secretary.

PATHOLOGICAL SOCIETY OF PHILADEL-PHIA.

THURSDAY EVENING, SEPTEMBER 12, 1878.

THE PRESIDENT, DR. H. LENOX HODGE, in the chair.

Mechanical microtome. Presented by Dr. C. Seiler.

I EXHIBIT to the members to-night a mechanical microtome of novel construction. which I designed for the purpose of making large, thin, and even sections of hardened tissues. A mechanical microtome in which the knife is held rigidly by moving parts of the instrument itself has been a desideratum for a long time, and many workers have designed and constructed such contrivances; but all of them started with the erroneous idea that a slide upon which the knife is fastened, and which runs at an acute angle to the tissue imbedded, would carry the knife through the tissue by a sliding motion, such as is produced by the hand alone making the section. This, however, is not so, and by means of such a slide the knife acts like a carpenter's plane, pushing through the tissue like a chisel instead of cutting like a knife.

By analyzing the motion of the arms in making thin sections I came to the conclusion that if the knife was attached to two arms, which are allowed to rotate upon fixed pivots attached to the section-cutter, the knife would pass through the tissue, each point of the cutting edge describing a curve whose radius is the two arms carrying the knife. The principle is identical with the one upon which the parallel rule is constructed, one blade of which being fixed allows the other to move to and fro in the same manner as the knife in this case moves.

After constructing a rough model of the apparatus, I asked my friend Mr. T. Zentmayer to construct the instrument. In doing so he added many improvements in the motion, and in the adjustment for different inclinations of the knife, which insure a perfect working of the instrument even in the hands of unskilled persons.

The specimens cut with this machine, which I have brought to show what can be accomplished in the way of large and thin sections, are: a longitudinal section of the leg of a five-months fœtus from the knee downward, measuring two inches in length and three-quarters of an inch in width at the widest part; a section of an epithelioma from the cheek, one-half by three-quarters of an inch; and a longitudinal section through the upper and lower maxilla of a five-months' fœtus, taking in the turbinated bone, measuring one and one-half by one and one-quarter inches.

It is needless to point out the great advantage of large sections, especially of pathological tissues, and I have no doubt that when this instrument becomes generally used we will have more and better microscopical examinations of tissues than at present, since many who would gladly work with the microscope are deterred from it by the difficulty of making thin sections.

Neuralgic tumor of the skin. Presented by DR. H. LENOX HODGE.

The tumor which I present to the Society to-night was removed last April from the forearm of a man about 48 years of age. There has been no return of the growth, and the patient has been entirely free from all pain.

The tumor was rounded, and measured sixeighths of an inch in diameter at its base, and in height five-eighths. It was of a bluish color, and was extremely sensitive. painful character of the tumor was its most remarkable characteristic. Even the rubbing of the patient's shirt upon the tumor was very painful. A slight pressure upon it would cause him to faint.

He first noticed it sixteen or seventeen years ago, on the outer side of his right forearm near the olecranon. It was then a small nodule like a bead, and not at all painful. About seven years ago the pain began, and has been steadily on the increase, until life became a burden and he was filled with a constant terror lest the tumor should be touched

or pressed upon.

During all these years the growth has increased very slowly in size. It contracted no adhesions to the deeper tissues, but remained

perfectly movable.

This colored drawing which I exhibit has been carefully made by my friend Dr. Taylor, Resident Physician of the Children's Hospital. It accurately represents the appearance, color, size, and situation of the tumor.

Dr. Seiler has kindly made the microscopical examination, and has placed a beautifully-stained section beneath the microscope for examination by the members of the Society. His description of its structure states "that it presents on section a network of well-developed connective tissue, the meshes of which are irregular as to size and shape, and are filled with both red and white blood-corpuscles. The dermis and epidermis covering the tumor appear atrophied, while the growth itself resembles the corpus cavernosum of the penis.'

The tumor, as the section shows, extends below the surface of the skin, and it appears probable that it arose in the connective tissue and gradually trespassed upon the skin. Notwithstanding its painful character, no connection with any nerve-fibre has been detected. By its growth it has probably pressed upon the minute nerve-filaments in the skin, and thus given rise to the intense neuralgic pain.

THE old Philadelphia School of Anatomy and Operative Surgery is to be revived, under the charge of Dr. John B. Roberts.

#### THE AMERICAN GYNÆCOLOGICAL SOCIETY.

'HE third annual meeting of this Society was held in Philadelphia, at the hall of the College of Physicians, on the 25th, 26th, and 27th of September, 1878. Twenty-seven Fellows of the Society were present from different parts of the Union, principally from the States east of the Alleghanies. Although the association can date its birth no farther back than the Centennial year, it has, from the first, taken a position in the front rank of organizations devoted to special departments of medical science, its published transactions have met with a flattering reception and ready sale, and medical reviewers, with one accord, have spoken of them in terms of unqualified praise. The active membership is limited by organic law to sixty Fellows, and in order to maintain the high standard adopted, it is prescribed that each new aspirant for membership must accompany his application with an original paper upon some subject connected with gynæcology, which essay is examined and reported upon by a committee before the candidate can be balloted for. A few Honorary Fellows may also be chosen.

The programme for this meeting contained the titles of twenty-three papers, some of which were not reached when the hour for adjournment brought the session to a close. Those that were read may, almost without exception, be considered as valuable contributions to gynæcology, and the discussions upon them were of great practical interest. The meetings were largely attended, many of the physicians of this city availing themselves of the opportunity of being present during the

proceedings.

The time of the Society being so largely occupied, during both the morning and afternoon sessions, by the literary and scientific exercises, but little opportunity was allowed for social entertainments; an attractive lunch was, however, provided at the close of each morning session, by several of our Philadelphia members who resided near the place of meeting. A reception at the residence of Prof. Goodell on Wednesday evening, and a dinner at St. George's Hall given by the Obstetrical Society on Thursday evening, were the public entertainments.

#### FIRST DAY.

The meeting was called to order by Dr. Goodell, first vice-president, at 10.30 A.M., and a brief address of welcome was delivered by Dr. A. H. Smith. After the calling of the roll, the secretary announced the names of a number of guests, who were invited to take part in the discussions.

Dr. J. C. Reeve read a report of a multipara, in which rupture of the perineum took place without implication of the vulva, the labor being otherwise uncomplicated, but very rapid. Prompt attention during the early

stages of labor, and the application of the forceps where indicated, will generally prevent this accident, which occurs most frequently in primipara, or in others where cicatricial bands exist in the lower portion of the

Prof. White advocated lateral incisions in the perineum where laceration is threatened.

"The Surgical Treatment of Stenosis of the Cervix Uteri," a voluminous article of 250 pages, by Dr. J. Marion Sims, of New York, was presented and extracts read from it by the secretary. The author advocated Simp-son's bilateral incisions of the cervix in those cases of anteflexion, complicated by stenosis, where the lips of the uterus are not relatively changed by inflammation. Sims's operation of antero posterior incisions, however, is urged where the posterior lip is thickened and elongated. A glass plug is inserted after the operation, and the vagina tamponed. The patient keeps her bed for several days, as pelvic cellulitis may appear on the fifth or sixth day, and Dr. Wilson, of Baltimore, in the discussion of the paper, reported a death on the fourteenth day. Dr. Sims had operated upon nearly a thousand cases and had two deaths.

Dr. Elwood Wilson, of Philadelphia, did not favor the operation described. He had found simple dilatation to accomplish all that

is desired, with less risk.

Dr. Noeggerath pointed out the fact that while these incisions are intended to strengthen the canal of the cervix in a case of anteflexion of the second degree, they fail to accomplish this, which he demonstrated by a diagram. They also invade the parenchyma of the uterus where there are lymphatic vessels and glands, and may thus lead to septic poisoning. He believed that most of the cases reported cured were, in reality, only temporarily relieved.

Dr. Fordyce Barker had encountered at least a hundred cases where this operation had been ineffectually performed for the relief of the condition referred to, and was cognizant of nearly a score of deaths from it which had never been published. He believed that precise rules for the recognition of cases re-quiring this operation are still wanting, al-though it has been before the profession for

nearly thirty three years.

Dr. Emmett formerly had performed this operation very often, but his observation had taught him, where the flexion occurs above the plane of vaginal junction, that it is generally the expression of trouble elsewhere. If the condition result from pelvic cellulitis or adhesions, the operation will fail to give

more than merely temporary relief.

"A Case of Extra-Uterine Pregnancy, with Discharge of Fœtal Bones through the Bladder," was reported by Prof. White, of Buffalo. The patient was not married, and the symptoms at first were those of dysmenorrhæa and

menorrhagia. In May, 1875, this condition had existed several months, and Dr. White. being called in consultation, detected an indistinct tumor in the left iliac region, percentible also in the vagina, which was thought to be a hæmatocele, pregnancy not being suspected. A puncture was made with the exploring needle, which brought away a few drops of a light, straw-colored fluid. Severe peritonitis followed the operation, but after it subsided the tumor was scarcely perceptible. but the clear fluid continued to come away for some time, as if a vesico-vaginal fistula had been established. In December the patient complained of vesical pain and tenesmus, and upon examination a bone was found at the urethra, and during the next three months small bones were frequently discharged, some of which were coated with calcareous deposit. The discharge of fœtal bones through the bladder was declared to be a comparatively rare accident. The case illustrates the truth of Dr. Parry's statement, that cases of extrauterine foetation should be left alone, as they do better if left to nature than when attacked with the knife.

Dr. John C. Atlee remarked, as an exception to this rule, that where there is danger threatening to the mother, an operation becomes necessary. He reported a case successfully operated upon by Dr. W. F. Atlee, of this city. He insisted that the placenta in such cases must not be interfered with by the surgeon, but the cord should be tied, cut short, and dropped into the abdomen.

A case of "Head and Foot Presentation in which a Fracture of the Spine occurred in Utero," was made the subject of a paper by Dr. Johnson, of Washington. In a similar instance of head and foot presentation, but complicated by placenta prævia, Prof. Penrose had succeeded in effecting version by placing a fillet around the presenting ankle and making traction upon it at the same time that the head was being pushed upward.

"The Necessity for Early Delivery, as demonstrated by the Analysis of One Hundred and Sixty-one Cases of Vesico-Vaginal Fistula," by Dr. T. A. Emmett, of New York, was a paper of great practical importance. demonstrating the danger of delay in the sec-ond stage of labor, and the value of the forceps in cases of impaction in the excavation. He laid down the rule, that when the head ceases to recede after each pain, the forceps should be applied. He had never seen a case where vesico-vaginal fistula was directly attributable to the use of the forceps.

In the discussion upon the paper, it was highly praised by Dr. Fordyce Barker, who said that the danger from the use of the forceps in competent hands has been greatly over-estimated. The importance of evacuating the bladder before artificial delivery must always be remembered. Dr. Penrose believed that the most valuable point in this

paper was that the author had defined with precision the exact period when the forceps The head only ceases to should be applied. recede when it has become impacted in the canal. Drs. Atlee, A. H. Smith, James P. White, Goodell, and others, spoke in commendation of the forceps where judiciously and skilfully used, but condemned their ignorant application as leading to injury, and often to lacerations, of the cervix uteri. Dr. Storer, of Boston, had not met with a rupture of the perineum where the forceps had not been employed; but in the hands of experienced men it was generally admitted that tearing of the perineum may be prevented in many cases by the forceps, which give the operator control of the head. Where the head is impacted and the bladder distended, Dr. Barker recommended the use of the aspirator.

(To be continued.)

## REVIEWS AND BOOK NOTICES.

DETERIORATION AND RACE EDUCATION. By SAMUEL ROYCE. Boston, Lee & Sheppard, 1878.

Sympathizing as we do heartily in the aims of this volume, and believing also in the value of some of the proposed remedies for "Race Deterioration," it is with great regret that we are forced to the conclusion that a little of the classical education which is so ridiculed in the book would have enabled its author to forge a much more efficient weapon of warfare. To think clearly, to state succinctly, to go forward steadily to the goal, and to be very careful as to asserted facts,—these essentials to the writer who would influence the world are canons too frequently honored in the breach and ignored in the observance by our earnest author.

The first part of the book is devoted to a statistical proving of the deterioration of the race. If there be any one language specially dear to the heart of the father of lies, it, we have long thought, must be that of statistics, so universal, so particular; so positive, so facile; so clear, so deceptive; so toilsome, so easy. Nevertheless, when we see, by the lurid glow of such facts as "that Asia has its 200,000 of blind people," that the race is rapidly deteriorating, and remember the accuracy of the blue-books of Thibet, the labors of the private secretary of the Khan of Tartary, and the vast researches of the ophthalmological mandarins of Pekin, we can do naught but bow our heads and say, Allah is great, and the pessimist is his prophet.

Seriously, we do not believe the race is deteriorating, physically or morally, but we do believe that there is in it a vast capability of improvement, and that the one mission for which the God-Man died and the highest

manhood now lives is the elevation of the individual and the race. We therefore welcome every effort at progress, saying, let us weigh honestly and judge calmly every proffered remedy for existent evils.

The measures of cure proposed by Mr. Royce are the institution by the government of infant Kindergarten schools, the conversion of all women into Kindergarten teachers, and the carrying on of the Kindergarten education by training-schools of applied science

and art.

New enterprises started at once upon a grand scale have, in our limited experience, failed so often that we have no confidence in them. It is the efforts commenced in modest but earnest diffidence, which, growing as the knowledge of the need and the experience how to meet it grow, reach a natural development of age, strength, and size. Kindergartens and schools of industry seem to have the germ of vast good in them, though they be not the immediate precursors of the millennium; and we therefore watch with the greatest interest their growth throughout the country, and do believe that little by little, more and more, they should be made a part of our common-school education, nourished aud sustained by general taxation.

## GLEANINGS FROM EXCHANGES.

Goître and the Hemorrhagic Tendency (*The British Medical Journal*, June 29, 1878).—Dr. R. Bruce Low, who resides in a district where goître abounds, has, after many observations, come to the following conclusions:

1. The water-supply in limestone districts has a powerful influence in deterioriating the blood, causing dyspepsia, anæmia, and a want of contractile power in the blood-vessels, as shown by the development of goître and tendency to hemorrhages, more especially flooding in childbed.

2. Goître and the hemorrhagic tendency are aggravated, and sometimes even produced, by certain conditions: e.g., over-crowding, bad ventilation, and damp dwell-

ings

3. Pregnancy assists in the development of goître and the hemorrhagic tendency.

4. The predisposition to goître and "flooding" is affected by consanguinity and heredity.

5. The best treatment for both conditions is change of locality, and the prolonged administration of some preparation of iron.

CASE OF FOREIGN BODY IN THE BLADDER

CASE OF FOREIGN BODY IN THE BLADDER (Transactions of the Rhode Island Medical Society, 1878).—Dr. Timothy Newell reports the case of a man, æt. 39, who came to his office with inability to pass his water. He had suffered from stricture of the urethra for several years. On the night before, on going

to bed, he introduced into the urethra a No. 1 gum-elastic catheter, put a small bit of a match into the orifice of the catheter to keep the water from dribbling away, and went to sleep. On awaking in the morning the catheter was nowhere to be found. He concluded that it had passed up the urethra. On examining the penis, Dr. Newell thought he could feel the catheter about midway of the urethra. Not having urethral forceps at hand, he spent some little time in endeavoring to obtain them, and on returning to his office found that from some cause the catheter had passed down the urethra nearly or quite into the bladder, for he could pass a gum-elastic bougie freely along the urethra to the prostatic portions, and water came quite freely. Under the circumstances it was not thought wise to make efforts to remove the catheter then. Very little inconvenience was felt from the presence of the catheter in the bladder until, on the evening of the fourth day after its introduction, an obstruction was felt in the urethra and a disposition to strain. Severe and prolonged efforts at straining were kept up for nearly three hours, when, to the very great relief of the patient, catheter and urine flew several feet out of the urethra. The catheter was in the bladder a little over ninety-six hours, and was, when expelled, covered with calcareous deposits.

NEURO-RETINITIS FROM INFLAMMATION OF THE DURA MATER ( The New York Medical Journal, September, 1878).—Dr. C. G. Hubbard reports the case of a woman, æt. 40, who for some years before coming under his observation had been affected with a gradually-increasing dimness of vision, accompanied by intense pain and tenderness over the right parietal region. These symptoms passed suddenly into those of acute cerebral meningitis, and necessitated very active treatment for their relief. During convalescence there were excessive local pain and tension of the scalp over the same region. Cantharidal blisters were repeatedly applied, but their vesicant effect was only produced after a halfdozen unsuccessful trials, the temperature of the scalp during this time being excessively high. Dr. Hubbard deduces from this and

other cases the following "practical lessons."

1. Where it is difficult to make a blister draw, a blister is much needed; the longer a blister discharges—other things being equal—the more good it does.

2. If bromide of potassium be given to relieve the engorged condition of the cerebral vessels, it should be given in large and oftenrepeated doses.

3. In giving stimulants in exhaustion give all that is needed, without reference to the

4. Dry heat is a powerful stimulant; in collapse it is the sheet-anchor. It will affect an inactive kidney more quickly than any medicine.

5. Iodide of potassium has a wonderful power over chronic inflammation of the cer-

ebral meninges.

HIGH TEMPERATURE BEFORE AND AFTER DEATH FROM YELLOW FEVER (New Orleans Medical and Surgical Journal, September, 1878).—Dr. C. S. Mercier reports the case of a German woman who was admitted to the Charity Hospital with well-marked symptoms of vellow fever and who died a few hours afterwards. Two hours before death the temperature in the axilla was III° Fahr. At the time of the autopsy, five hours after death, a thermometer placed in the axilla indicated 105.5°, and another in the hypogastric region, after an incision had been made through the abdom-

inal walls, recorded 109°.

DEATH FROM VOMITING DURING ETHER ANÆSTHESIA.—The Liverpool Daily Post records a case occurring at the Northern Hospital, in which vomited matters found their way into the windpipe and caused rapidly fatal asphyxia. Shortly after the administration of ether the patient commenced to vomit, and it was subsequently found that a portion of the vomit went into the windpipe and lungs. The windpipe was opened, and every effort was made to save the man's life, but in vain.

-British Medical Fournal.

# MISCELLANY.

DR. CARL WARBURG.—In a letter to the Times, Surgeon-General W. C. Maclean, M.D., states that, according to the Sanitary Commissioner of Madras, malarial fevers in India destroy on an average twice as many people as smallpox, cholera, and all other epidemic causes put together; and that in their treatment he has found no remedy so effective as the combination of quinine that exists in Warburg's tincture. There is, in Dr. Maclean's opinion, an overwhelming amount of evidence to this effect. He states, however, that Dr. Warburg, who gave the formula for his tincture to Dr. Maclean, and consented to its publication, is now in deplorable circumstances. Those persons "who advised him to publish his secret hoped that Government would so far reward him as to purchase their supplies from him, and thus enable him 'to keep the wolf from his door.' This has not been done, and, far from having derived any benefit from the publication of his formula, he has been ruined by it."—British Medical Journal.

THE LARGEST PLANT IN THE WORLD .-We are accustomed to regard the great trees of California as the most gigantic specimens of vegetable growths known to man; but such is not the case. There is a submarine plant growing in the North Pacific Ocean which, according to Prof. Reinsch, dwarfs all others in its vast proportions. The Macrocystis pyrifera, one of the Melanospermæ, has been known to grow to such an extent as to cover

vast areas of the ocean bed. One specimen by measurement was found to cover three square miles, and the stem from which the growth proceeded was eight feet in diameter.

THORACIC ANEURISM.-DIAGNOSIS OF Surgeon-Major W. S. Oliver employs the following plan: Place the patient in the erect position, and direct him to close his mouth and elevate his chin to the fullest extent, then grasp the cricoid cartilage between the finger and thumb, and use gentle upward pressure on it, when, if dilatation or aneurism exist, the pulsation of the aorta will be distinctly felt transmitted through the trachea to the hand. The act of examination will increase laryngeal distress should this accompany the disease.-London Lancet.

No STIMULANTS.—The Doctor says that the other day a physician, to a patient inquiring, "What ought I to take or to do when my feelings of exhaustion come on?" replied, "Go and lie down, like any other beast.

CHARLES LAMB'S opinion of hydropathy: "It is neither new nor wonderful; for it is as old as the deluge, which, in my opinion, killed more than it cured.

A CHEAP AND GOOD PREPARED GLUE.— Dissolve common glue in cider vinegar as thick as may be wanted; as it becomes thick from time to time add vinegar.

DR. HENRY TIZARD details (British Medical Fournal, September 21) a case of recovery after the ingestion of one hundred and sixty grains of chloral with suicidal intent.

Two hundred and twenty-seven fatal accidents are stated to have occurred last year in the London streets.

MR. N. S. FOSTER (London Lancet, September 21) has found the hypodermic injection of ergotin advantageous in apoplexy.

At a recent date twenty-five per cent. of the English troops stationed in Cyprus were

THE following is the number of deaths, etc., among the military doctors and their assistants during the Turco-Russian war:

	Sick.	Died.	Wounded.	Killed
Doctors	692	94	2	***
Assistants	1915	217	28	13
Apothecaries		5	***	***
Veterinary surgeons	30	5	***	***

# NOTES AND QUERIES.

EAST BETHLEHEM, WASHINGTON Co., PA. EDITOR PHILADELPHIA MEDICAL TIMES:

DEAR SIR,—About two years ago I gave you a detailed account of several tailures to cure diphtheria with well-known account of several tailures to cure diphtheria with well-known remedies. I might now considerably enlarge the list of remedies that will not cure in those malignant cases which it is our misfortune to meet. And if we know what not to rely upon, would that not aid us in finding something that might be a benefit in those cases? I think that chlor, potass, may be of some value in this disease, and yet I could not affirm to even this in open court. By the way, let me say, as Prof. Gross used to remark, "I speak advisedly, gentlemen," having had a large experience in this disease. I incture of iron is a failure, Mousel's solution as a local application will not answer. Sulphur will not do. Aromatus sulphure acid and quinne will. Sulphur will not do. Aromatic sulphuric acid and quinine will not answer. Hydrarg, bichlor, and hydrarg, chlor, mit., the

last recommended by Dr. Reiter, of Pittsburg, Pa, are probably of little account, although I have not yet given Dr. Reiter's favorite remedy a tair trial. And I think carbolic acid is almost useless. I could further enlarge this list, and no doubt my brother-practitioners could extend it much more. Why should we not experiment more? It cannot make the disease much worse in those horrible malignant cases. And disease much worse in those horrible malignant cases. And may we not in time, by a process of eliminating the non-cures, arrive at the real antitote? Young doctors are ready to give a remedy, whitst the older members of the profession are more slow in advising any particular drug. Some are hopeful, saying, "I was not called in soon enough," or "I he patient would not take the remedy," or stating more truly, "It was a very peculiar case." Do not think I am a grumbler. I am proud of the past achievements of our noble predecessors, and think I can now teel the coming event that will cast no shadow before.

will cast no shadow before.

Let us try on intelligently and work for the desired end; but at the same time for our own benefit let us be honest and acknowledge to ourselves, at least, our inability to cure this disease. Our microscopists class this as a parasitic disease. And it appears to be the case in all nature that one animal is created to prey upon another, or one plant to live upon another; but I could hardly say in this particular case that there was always a "survival of the fittest."

According to Malthus, nature will not permit of the crowding of human beings very closely, at least not without proper sanitary regulation. Such being the case, this disease may be a legitimate effort to get rid of a surplus population.

Taking this view, our remedy must be in the ounce of pre-

Taking this view, our remedy must be in the ounce of prevention which is worth so many pounds of cure. In investigating this disease we should ask, Does it attack children more frequently than adults? and, if so, why? Does it attack man exclusive of all other animals? and, if so, why? tack man exclusive of all other animals? and, it so, why? Why should one case be so much more fatal than another? Will we ever treat this disease as well as we do matarial poisons? I would like to say more upon this subject, but shalt conclude this article for the present.

Truly yours,

W. G. COTTON, M.D.

September 30, 1878.

#### EDITOR PHILADELPHIA MEDICAL TIMES:

DEAR SIR,-My friend Dr. Levis, when going round with DEAR SIR,—My friend Dr. Levis, when going round with me at St. Bartholomew's, saw several specimens of his extension apparatus in action, and his visit reminds me that I have not written to you, as had been my intention, respecting a notice of this apparatus which appeared in the Philadelphia Medical Vimes of May 25. I wished to add my testimony as to the great usefulness of the appliance. So tar back as 1874, Dr. Levis was so kind as to supply me with a sample, and I have ever since employed it, and on a large scale, for the purpose of weight-extension. It is one of the most service the apparatus of the purpose of weight-extension. It is one of the most service the apparatus of the service the apparatus of the service the apparatus of the service the service that the service of the apparatus of the service the service of the apparatus of the service of the apparatus of the apparatus of the service of the apparatus of the appar and thave even since employed in an arrange in the purpose of weight-extension. It is one of the most serviceable amongst the many excellent appliances for which we are indebted to American surgery.

I am faithfully yours, JOSEPH CALLENDER, F.R.S.

7 QUEEN ANNE STREET, September 16, 1878.

#### OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY FROM SEPTEMBER 22 TO OCTOBER 5, 1878.

RANDOLPH, J. F., MAJOR AND SURGEON.—Granted leave of absence for six months, on account of sixkness, to take effect October 1, 1878. S. O. 207, A. G. O., September

HEIZMANN, C. L., CAPTAIN AND ASSISTANT-SURGEON.—Assigned to duty at Fort Vancouver, W. T. S. O. 115, Department of the Columbia, September 14, 1878.

AINSWORTH, F. C., FIRST-LIBUTENANT AND ASSISTANT-SURGEON.—To accompany troops from California to Camp McDowell, A. T., and then report to the Com-manding Officer Department of Arizona for orders. S. O. 141, Division of the Pacific and Department of California, September 14, 1878.

GRAY, W. W., FIRST-LIEUTENANT AND ASSISTANT SUR-GEON.—When relieved by Assistant-Surgeon Heizmann, to report for duty at Fort Colville, W. T. S. O. 175, c. s., Department of the Columbia.

CHERBONNIER, A. V., CAPTAIN AND MEDICAL STORE-KEEPER.—Granted leave of absence for one month. S. U. 213, A. G. U., October 3, 1878.

# PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, OCTOBER 26, 1878.

#### ORIGINAL LECTURES.

LECTURES ON A CASE OF FACIAL MONOPLEGIA, ILLUSTRATING THE LOCALIZATION OF CEREBRAL FUNCTIONS AND LESIONS.

Delivered at the Philadelphia Hospital, October 5, 1878, BY DR. IOHN GUITÉRAS.

One of the Physicians to the Hospital, and Lecturer on Symptomatology in the University of Pennsylvania,

#### LECTURE I.

ENTLEMEN, - When we began to study together the series of cases of nervous affections that I have had the pleasure of bringing before you, I promised to devote some time to the subject of localization of cerebral lesions. to make you acquainted with some of the recent investigations that have opened this new field of physiology and pathology. desired that you should become familiar with the anatomy of the parts, that you might intelligently study this most interesting subject, comprehend the meaning of many clinical facts, profitably connect them with the lesions found at the postmortem table, and thus contribute to the solution of this important problem.

Your method—the classical method—of studying the anatomy of the brain is very deficient. But a few days ago Dr. S. Weir Mitchell, in his Introductory Address at the University of Pennsylvania, stated that all cases reported before the last decade, previously to the agitation of these questions, should be excluded from consideration. Now, I very much fear that, if your attention is not more frequently drawn to the work that is being done in this department of medical science, your labors of the next decade will be useless, your cases

of no value.

The case I have to show you to-day illustrates the effects of a lesion situated in what is called the motor area of the cortex of the brain. We start, then, with the knowledge of this fact, that there is a circumscribed portion of the cerebral convolutions where the volitional impulses originate which result in muscular movements. I shall prove to you that the disturbances of motion present in our case are due to a lesion of this motor area.

I give you the history of the case, excluding many interesting features symptomatic of the cardiac affection:

John J., æt. 58, tailor by trade, intemperate. He was admitted to the Philadelphia Hospital, September 6, 1878. The notes were taken shortly after. The patient never had rheumatism or syphilis. About last Christmas he "caught a cold," and began to suffer with symptoms of cardiac insufficiency. July 6 he was admitted into the institution as a pauper. He complained of weakness, but was not considered sick enough to be sent to the hospital. There was no facial palsy. A few days afterwards he noticed difficulty in moving the food in the mouth, and he was told that his face was crooked. The cardiac symptoms became gradually worse, and he was transferred to the

hospital.

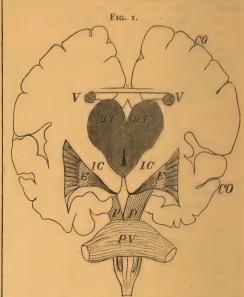
There is left facial palsy, especially marked in the lower portion of the face. Though he can close the left eye perfectly, the act is not performed as firmly and rapidly as with the right eye. No difference can be noticed between the two sides in frowning. About the mouth and nose the paralysis is almost complete; in the performance of associated movements there seems to be some activity of the paralyzed muscles. The left nostril is smaller than the right. The faradic excitability, though somewhat below the normal, does not differ in the two sides. The same may be said of common sensibility and the perception of pain and heat. The temperature is the same on both sides of the face. There is some excoriation about the right angles of both eyes. This is due to the position of the patient. He always lies upon the right side, so that the ædema of the face and body is much confined to this side. There is no arcus senilis, no inequality of the pupils. Power of vision is good. The sense of taste is very obtuse, but no difference can be detected between the two sides. The food accumulates in the recesses of the mouth. Some years ago he had impacted cerumen removed from both ears, and he thinks his hearing has not been perfect since. This is not apparent when speaking to him, but he cannot detect the ticking of a watch with either ear. He never had noises in the ear, and is not subject to vertigo or headache. The arch of the anterior pillars of the soft palate is well shaped, but the left posterior pillar drops considerably. The point of the uvula is drawn towards the paralyzed side. The muscles of the tongue are normal. There is no motor paralysis of the lower extremities. The dynamometer marks 24 for the left and 27 for the right hand. He has perfect use of these extremities. The æsthesiometer shows a slight impairment of the sensibility throughout. There is a general sluggishness of nervous functions, induced by the general mal-nutrition of advanced cardiac cachexia.

The patient has dilatation of the arch of the aorta, aortic regurgitation, and great enlargement of the heart, mainly from dilatation. The respiration is tidal to a marked degree. It ceases for about fifteen seconds, and then gradually returns, to subside afterwards in the same manner. I counted one, two, four, six, and seven respirations in five consecutive sixths of a minute. During the respiratory excitement the fluids of the mouth are occasionally drawn into the larynx, producing choking and coughing. There may be some defect in deglutition, but the disorder of respiration seems enough to account for the symptoms. His speech is very rapid, because he endeavors to say as much as possible during each expiration. He cannot control the respiratory movements. At times the inspiratory act seems to surprise the larynx in the act of phonation, and a paroxysm of cough is the result.

He continued much in the same condition until the 30th of September, when he was found to be in a semi-comatose condition, with some wandering delirium. The following note was made at the time. There is distinct, though by no means complete, motor paralysis of left arm and leg. The facial paralysis is not changed. The perception to pain is as good as can be expected of his condition. The surface is cold and cyanotic. There are evidences of embolism of the right brachial artery. No difference between the pupils. Respiration continues tidal. The pulse is 25 during one-third of a minute of absolute arrest of respiration, and the same in the next twenty seconds of rapid breathing. During the time of suspended respiration the lungs are in a state of full expiration, and no power of his will seems able to expand them; so that when I ask him to say his name he repeats it with mouth and lips, but there is scarcely enough air expelled through the larynx to raise a whisper; then, as the respiration returns, he continues to repeat the name until the voice reaches its full development. To-day, the 5th of October, he is comatose, and is dying of asystole.

I shall now give you an outline of the anatomy of the brain, as far as it bears upon the present case. These diagrams will enable me to make the subject clear. In Fig. 1 you have a transverse section of the brain. V represents the posterior extremity of the ventricular portion of the striated body; E, the extraventricular portion, or lenticular nucleus. Between these two anteriorly (in the parts removed by the section), and between the lenticular nucleus and the optic thalamus, O T, posteriorly (as seen on the surface of section), is found the internal capsule, I C. This is made up of a large portion of the nerve-

fibres that form the peduncles, PP, or crura of the brain. These fibres come from the



medulla, MO, pass through the pons, PV, form the more superficial portion of the peduncles, and, when they arrive between the central ganglia above mentioned, expand antero-posteriorly, like a fan. The section here seen is one perpendicular to the antero-posterior axis of this expansion. The fibres continue to diverge until they reach the broad expanse of the cortex, CO. I may say to you at once that we shall have to deal to-day only with the two anterior thirds of this internal capsule: they contain the motor fibres, and our case is one of motor paralysis. In fact, we shall only dwell upon those fibres of the anterior capsule that pass directly from the peduncles to the cortex; yet it is well that I should tell you that there are many fibres that stop on their way,-fibres from the superficial portion of the peduncles which are lost in the striated body,—fibres from the deeper portion (the tegmentum) that pass into the optic thalamus and corpora quadrigemina. Also remember that from all these ganglia fibres are given off, which, together with the direct ones, contribute to the formation of the great expansion of white matter underlying the convolutions of the brain. This is called the great oval centre, and receives the name of corona radiata where the nerve-fibres radiate from the basal structures.

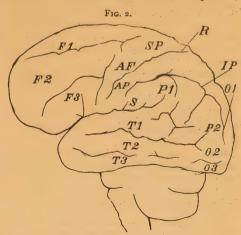
I dismiss the posterior third of the in-

ternal capsule by saying that it consists of sensory or centripetal fibres. We unfortunately have no positive physiological proof of their place of destination; we do not know, in other words, where in the cortex are the centres of sensation to which these fibres carry the peripheral impressions. Anatomy would point to the posterior lobes of the brain; so also to a certain extent do experimental physiology, and some experiments performed for us by disease. I shall, therefore, dismiss for the present the occipital, the temporosphenoidal, and the posterior part of the parietal lobes.

Let us return to the motor fibres. I left off a moment ago without telling you of their final destination. Here the task is easier, thanks to the labors of Hitzig, Hughlings-Jackson, Charcot, Ferrier, Carville, Duret, and others. The area of gray matter of the cortex, from which motor (centrifugal) impulses are sent down the anterior thirds of the internal capsule.—impulses that may be modified or co-ordinated in the ganglia before they reach the crura and anterior columns of the cord,—this area, I say, which controls the muscular movements, is well defined. When destroyed experimentally in the lower animals and by disease in man (and here let me remind you that we are touching the point of our case), there is paralysis of motion in some portion or the whole of the opposite side of the body: when this area is irritated by either of the two processes mentioned, you have some form of muscular movement in the same parts of the body. I have said the opposite side of the body. You are all aware that the great majority of the motor nerve-fibres decussate at the anterior pyramids of the medulla.

I call your attention to this diagram (Fig. 2), which gives an outline of the convolutions of the convexity of the brain. The fissure of Sylvius, S, separates the frontal and parietal lobes above from the spheno-temporal lobe below. Near its commencement arises the fissure of Rolando, R. It extends obliquely upwards and backwards, and terminates about the middle of the great longitudinal fissure. It separates the frontal from the parietal lobe, and is the landmark of the motor In fact, the motor area forms the borders of this sulcus: thus, in front we have the ascending frontal convolution, A F; to this may be added the neighboring

bases or posterior extremities of the three frontal convolutions, termed superior,



middle, and inferior, F1, F2, F3. Behind the fissure of Rolando we have the ascending parietal convolution, AP. These two ascending convolutions extend beyond the fissure of Rolando, above; that is, they turn into the great longitudinal fissure, appearing in the medial surface of the hemisphere, under the name of paracentral lobule. The structure of these convolutions indicates their motor function. They are abundantly supplied with the large, pyramidal, multipolar cells which correspond to the large cells in the anterior cornua of the cord. The latter, as you know, are motor.

But, further than this, experiments on the lower animals, especially those made by Ferrier on monkeys, prove that these convolutions are closely related to the function of muscular motion. He has even divided this area into smaller ones having under their special control the muscles of special regions. The upper portions of the ascending frontal and ascending parietal convolutions he found to be the motor centre for the upper and lower extremities, the base of the first frontal convolution for certain movements of the head, the base of the third frontal for the movements of the tongue and jaw.

Before referring to that portion of the motor area which bears more closely upon our case, let me tell you something further about these experiments. They consist in the application of electrical currents to circumscribed portions of the area. Certain movements follow in the periphery. These movements are said to be purposive,

—that is, they appear to resemble volitional movements: the anterior extremity, for instance, will move as it does in the act of prehension, and so on. That these movements are not due to the diffusion of the electrical currents towards the basal ganglia is proven by many ingenious experiments: the fact is that the results are by no means in proportion to the proximity of the poles to these central ganglia. Finally, destruction of these cortical centres produces paralysis of the previously excited muscles.

In the enumeration of the centres I purposely left out the centre for the movements of the face. This is localized by Ferrier in the middle portion of the ascending frontal convolution. Our patient has facial paralysis. Now, if I can prove to you that the source of this paralysis is not to be found anywhere in the course of the fibres of the facial nerve, you must admit that the lesion must be found in the centre; and if in the post-mortem examination, which I fear cannot be averted in this case, a lesion is found in the middle portion of the right ascending frontal convolution, you will have a most trustworthy confirmation of the experiments of the physiological laboratory.

In my next lecture I shall study with you the symptoms of our own case. But, before parting, let me tell you that such confirmations as I have just mentioned are not wanting in the history of modern pathology. They are becoming every day more and more numerous, because the cases are more intelligently studied. It may be said, indeed, that the theory of localizations is based equally upon physiological experimentation and the data furnished by the clinician and pathologist.

## ORIGINAL COMMUNICATIONS.

ON THE THERAPEUTIC USE OF CALABAR AND ESERINE IN EYE-DISEASES.

BY M. LANDESBERG, M.D.

CALABAR BEAN, a legumen, is indigenous to the kingdom of Dahomey, on the coast of Guinea, and is known to the natives under the name of "eséré." The fruits were brought to England first by

a missionary,—Waddal, of Old Calabar,—and presented to the renowned Scotch toxicologist Christison, who made experiments with them on animals, and published the results of his physiological investigations in February, 1855.

The credit of having first discovered the myotic qualities of the calabar bean belongs to Dr. Thomas Fraser, of Edinburgh, who gave full details of his investigations on this subject in his inaugural

dissertation published July, 1862.

The statements of Dr. Fraser were confirmed and enlarged soon after by Argyll Robertson, Soellberg Wells, Bowman, Donders, Von Graefe, and others. Bell & Co., druggists, in London, first manufactured the current preparations of the calabar bean,—the alcoholic extract and the calabar paper,—and thus facilitated the rapid introduction of the new remedial

agent into oculistic practice.

But the following experiences did not answer the high expectations excited at first by this most efficacious of all myotic remedies known until then. As an antagonist to atropia, calabar proved to be somewhat unreliable and much weaker in its action: besides, its use, both in the form of the extract and the paper, was followed by the very disagreeable effect of irritating the eye to such a degree that it was hardly advisable to continue its application for any length of time. In cases of mydriasis and paresis of the muscle of accommodation, calabar proved to be almost inefficacious. Its results in detaching posterior synechiæ were very questionable. Its application in cases of glaucoma prior to the operation, in order to contract the pupil and thus facilitate the technics of the iridectomy, as Von Graefe recommended it, did not meet with the general approbation of the profession. The benefit of the application was small compared with the injury brought about by the irritating properties of the drug.

The first impulse of enthusiasm being over, the application of calabar in oculistic practice had become obsolete until lately, when the researches of Adolph Weber and Wecker formed the commencement of a new era of therapeutic use of calabar. At the same time it occurred that the active principle of calabar, called physostigmin by some, and eserine by others, was isolated, and a preparation was thus obtained which, absolutely efficient in

its actions, may be applied without pro-

ducing any irritation of the eve.

A. Weber (see *Von Graefe's Archives for Ophthalmology*, 22, iv. page 215, and 23, ii. page 161), after various physiological investigations and clinical observations, came to the following conclusions:

1. Atropia diminishes the intraocular pressure in the normal eye, if at all, only in the space of vitreous humor, while it always increases it beyond its normal condition in the anterior chamber.

2. Calabar increases the intraocular pressure of the normal eye in the space of vitreous humor, and diminishes it very con-

siderably in the anterior chamber.

From the knowledge of the physiological actions of calabar upon the eve, the indications for the use of this drug in certain diseases of the eye become obvious. In all deep ulcerations of the cornea, in which the latter is not able to bear the intraocular pressure and is very liable to perforation, calabar must be called into action to diminish the intraocular pressure of the anterior chamber and thus obviate the perforation of the cornea. Besides. Weber observed that during the use of calabar (resp. eserine) the small arteries of the eye are made to pulsate. It follows that by that action the current of the fluids of the tissues is accelerated, decay prevented, and restitution favored.

Weber made use of calabar in the follow-

ing morbid processes of the eye:

I. In all deep ulcerations of the cornea.

2. In keratoconus.

- 3. In exulcerating staphylomata of the cornea.
  - 4. In keratocele.
  - 5. In maculæ corneæ.
- 6. In peripheric prolapse of iris and in posterior synechiæ.
- 7. In pareses and paralyses of the muscle of accommodation and of the sphincter of the iris.
- 8. In cases of glaucoma, under especially fixed indications.

In the beginning of his therapeutic experiments Weber used extract of calabar, afterwards, from 1876, sulphate of eserine

only, in a solution of one per cent.

The sulphate of eserine, which he at first ordered from Vée in Paris, represented a substance similar to fragments of colophony, which dissolved in water was first colorless, became very soon (after an hour) of a reddish color, and gradually as-

sumed deeper tints, until it had the color of Malaga wine.

The sulphate of eserine, which Merck in Darmstadt soon afterwards manufactured, and which Weber is now using exclusively, represents an amber-yellow granular powder, the watery solution of which is first colorless, but undergoes afterwards the same changes of color as Vée's preparation,—with this difference, that it does not become so deeply red as the other.

Wecker first made use of eserine in his practice. I first saw the preparation and its application during my visit to his clinic in the fall of 1875. He used it at this time exclusively as a myotic, in order to contract the pupil after the operation of cataract, performed according to his method, with the intention of avoiding by this pro-While using cedure prolapse of the iris. eserine for that purpose, Wecker observed that it diminished the conjunctival secretion, and that it had a very favorable effect in checking the suppuration of the cornea which sometimes occurs after the operation of cataract. Induced by these experiences, besides presuming eserine to possess antiseptic qualities (which was refuted by the experiments of Schmidt-Rimpler), and holding with Harnack and Witkowski that this alkaloid brings about tetanization of the smooth muscular fibres of the blood-vessels, restricting thus the diapedesis, he began to administer it in cases of deep diffuse ulcerations of the He is now using eserine according to the same indications as Weber, agreeing with the latter in his high appreciation of this drug. (See Klinische Monatsblätter für Augenheilkunde, February, 1877, and May, 1878.)

Wecker uses the sulphate of eserine, manufactured by Vée. It is obtained in pointed, white-yellowish crystals, which are very hygroscopic, changing easily to a yellowish-brown colophony-like mass, if not kept carefully closed. The solution of one per cent., which Wecker uses, represents a yellowish, perfectly clear fluid, which in cold weather becomes slightly reddish only on the second or the third day. In summer the discoloration sets in after the lapse of twenty-four hours, and the solution becomes deep solferino-red. In this condition the drug loses some of its

efficiency.

Laqueur, independently of Weber, was brought by theoretical arguments to em-

ploy eserine in cases of glaucoma. The fact that the administration of atropia gives rise in some cases to glaucoma suggested to Laqueur the idea of using the antidote in treating this affection. In the course of his experiments he discovered that eserine diminished the intraocular pressure. preliminary communication in Centralblatt für Med. Wissenschaften, 1876, No. 24, on this subject, was followed lately by a detailed article in Von Graefe's Archives for Ophthalmology (23, iii.), entitled, "On the Use of Eserine in Cases of Glaucoma."

Reus published in V. Graefe's Archives (23, iii.) an article "On the Physiological Actions of Eserine on the Normal

Human Eve."

To Weber belongs undoubtedly the high credit of having first called the attention of the profession to the therapeutic value of calabar in certain diseases of the eye.

The article of Weber on calabar and its therapeutic use came under my notice early

in February, 1877.

The high praise given to calabar by this most scrupulous and exact observer, and the success which he claimed to have obtained with this drug in the most severe ulcerations of the cornea, induced me also to give this remedy a trial according to the indications stated by Weber, in order to learn by my own experience its value and its importance.

In the beginning of my therapeutic experiments I was compelled to make use of the extract of calabar. The eserine, a Vée's preparation, procured by Mr. G. Krause at my suggestion, proved to be a useless drug, with the sole effect of irritating the eye. Afterwards I used the sulphate of eserine made by Merck, in Darmstadt, which is a very good preparation, of constant qualities.

This sulphate of eserine represents a substance of colophony-like consistency; it gives at first a slightly reddish solution, which in the course of time assumes a wine-red color, but without losing its myotic

power.

I am using in my practice a solution of one per cent., of which, in the beginning of the treatment, one drop is instilled every The use is afterwards diminished according to indication.

I have used eserine in the following

morbid processes of the eye:

1. In all deep, diffuse, or circumscribed ulcerations of the cornea.

- 2. In keratocele.
- 3. In maculæ corneæ.
- 4. In perforating wounds of the cornea.
- 5. In certain forms of torpid infiltration of the cornea.
- 6. In paralysis of the muscle of accommodation consequent upon diphtheria.
  - 7. In traumatic mydriasis. 8. In glaucomatous processes.

The ulcerating processes of the cornea gave the largest percentage of my experi-

ments with extract of calabar (resp. eserine). From the copious material of the observed cases I will publish only those which are most fitted to illustrate the new method of treatment, and to contribute to the solution of the question if, and how far, the use of calabar resp. eserine is to be regarded as a progress in the treatment of eve diseases.

Case I.—C. T., laborer's child, 2 years old,

was brought to me May 3, 1877. I stated:

Right eye.—Inner half of the cornea totally dim. A deep ulcer occupies the upper inner quadrant of the cornea, from which purulent infiltration radiates to the outer half of the cornea. Iritis and hypopyon, ciliary neuralgia, and spasms of the lids very severe.

Left eye.—Normal.

The treatment consisted in the beginning, according to the old method, in the application of atropia and warm poultices. was no improvement. The ulceration spread to the deeper layers and advanced to the inferior inner quadrant of the cornea. Perforation was imminent. I made paracentesis and applied a compressive bandage.

The bandage was not of great avail, the child being under out-door treatment, and the mother careless. The whole cornea became infiltrated. Keratocele appeared on the up-

per inner quadrant of the cornea.

On the seventh day of treatment I resorted to extract of calabar (gr. i to three drachms of glycerin), of which one drop was instilled every hour; besides warm poultices, but no compressive bandage. The morbid state remained stationary within the three following days. On the fourth day the opacity of the outer half of the cornea cleared up, and keratocele became less bulging. The ulcerated bottom began to clear and fill up. On the sixth day several vessels appeared on the upper inner periphery of the cornea, starting from the limbus conjunctivæ to the ulcerated spot. These gradually increased, forming a broad band occupying the whole breadth of the upper inner quadrant of the cornea. Keratocele and hypopyon disappeared.

While the healing process was going on, infiltration appeared on the inferior inner quadrant of the cornea. The ulcer was of oval shape, with ragged edges and diphtheritic bottom. Hypopyon set in, and perfora-

tion of the cornea was imminent.

The process of purulent infiltration of circumscribed parts of the cornea was repeated in the inferior outer and superior outer quadrants of the cornea.

Under application of calabar and warm poultices, the final result was perfect transparency of the central part of the cornea, with opacity of its peripheric parts.

Case II.—D. G., washerwoman's daughter,

æt. 8, was brought to me August 8, 1877.

L. E.—In the upper third of the cornea there was a circumscribed round ulcer, penetrating to the membrana Descemetii, and forming keratocele.

Treatment: extract of calabar, and warm

poultices.

On the third day pupil was contracted to the utmost, and prolapse of iris removed from

the bulging bottom.

In spite of the carelessness of the mother in following the medical advice, the progress of reparation was very favorable. The ulcer healed, leaving a circumscribed leucoma of the cornea and normal pupil.

Case III.—H. A., baker, æt. 45, came under my treatment September 15, 1877, with a central ulcer of the right cornea and iritis. Cause

probably traumatic.

On atropia, pupil dilated only very slowly. There were posterior synechiæ. A five-days treatment with atropia and warm applications brought no essential improvement. On the sixth day I gave extract of calabar.

From that time reparation set in, and the healing process advanced slowly but steadily. There remained only a slight macula and two

very thin posterior synechiæ.

Case IV.—C. G., laborer's child, æt. 2 weeks. I saw it January 28, 1878, with the following condition: blennorrhæa neonatorum of both eyes; suppuration highly developed.

Right eye.—In the inferior third of the cornea, central perforation and prolapse of iris. The peripheric parts of the cornea are dim. The purulent infiltration radiates to the upper half of the cornea.

Left eye.—Deep ulcer in the inferior half of the cornea. Keratocele. Infiltration of the lateral parts and the upper half of the cornea.

Therapeutics.—Division of the outer commissure of both lids. Strong solution of nitrate of silver for touching the lids. Of eserine one

drop every hour. February 4.—The ulceration of both corneæ in process of reparation. Anterior chamber restored. The upper half of the cornea transparent. Suppuration diminished. Pupils contracted to the utmost.

February 20.—Anterior synechiæ of both

R. E.—Leucoma adhærens of the whole inferior half of the cornea. The central part of the cornea is dim, and only its upper third transparent.

L. E.—Circumscribed leucoma of the cornea. Its upper half and lateral parts are transparent.

Case V.-F. B., laborer's child, æt. 18 months. Scrofulous diathesis. Poorly fed. Face flaccid, livid. Very little care and attendance from the mother's side.

The child came under my out-door treatment March, 1878. It was suffering from a central deep ulcer of the right cornea with hypopyon, filling nearly the half of the anterior chamber. I applied warm poultices and eserine. While under this treatment, the morbid process began to subside and reparation set in: there appeared on the left cornea. near its centre, a small superficial infiltration of the size of a pin's head, with very slight symptoms of irritation. Under atropia, infiltration very rapidly spread over the whole surface of the cornea, penetrating to its deepest layers, and making perforation imminent. This change occurred There was hypopyon. within two days, during which I did not see the child.

I resorted to eserine and warm applications. The progress of the morbid process was soon stopped and reparation induced.

In the course of the summer, when corneal ulcerations often recurred, with tendency to malacia, the morbid process was quickly checked by the use of eserine.

Both eyes were restored to their normal state, without synechiæ, but with small mac-

ulæ corneæ.

Case VI.-H. B., laborer, æt. 48, came under my treatment April 5, 1878, with a perforated wound on the upper third of the right cornea, caused by a blow with a hammer. Anterior chamber obliterated; hyphæma; iris, swollen and discolored, lay close to the back surface of the cornea, forming a small prolapse in the corneal wound; ball soft; quantitative perception of light. The accident had occurred eight hours previously.

The out-door treatment consisted in application of eserine and of a simple bandage over the eye. After twenty-four hours the anterior chamber was partly restored and the blood partly reabsorbed. The pupil was contracted to the utmost, and the prolapse of iris retracted. The edges of the wound were sticking together. The treatment resulted in a perfect cure, with superficial linear cicatrix of the cornea.

Case VII.—C. F., workman, æt. 39, came to me July 8, 1878, stating that a piece of iron had struck his left eye in the afternoon of the same day, and that a fellow-workman had tried to remove the foreign body, but with only partial success.

On examining the eye I found in the centre of the cornea a small infiltration with a dark speck in its centre. Around the infiltration epithelium was very badly injured and scratched, as a result of the attempts at removal of the foreign body. One end of a piece of iron was impacted in the deeper lamellæ of the cornea, whilst the body itself reached into the anterior chamber. Slight

irritation and hyperæmia of iris.

I instilled at once some drops of eserine into the eye, and when pupil was contracted to the utmost I introduced a broad iridectomy-knife into the anterior chamber, pressed its broad surface against the posterior wall of the cornea, forced the body forward and lifted it out by means of a chisel. Perforation of the cornea could not be avoided. The further treatment, consisting in eserine and a simple bandage over the eye, resulted in complete recovery. Patient returned the day following his injury to his work.

Case VIII.—F. B. Smith, æt. 18, came under my notice August 8, 1878, five hours after having been struck on his right eye with a chisel. There was a penetrating wound of the cornea, extending diagonally from above outward to the pupillary region, with prolapse of iris and hemorrhage in the anterior chamber. Intraocular pressure diminished. Vision reduced to quantitative perception of

light.

Therapeutics.— Eserine and monocular bandage. Corneal wound closed very rapidly, healing with linear opacity; prolapse of iris retracted; intraocular pressure became normal. A very fine filament of the pupillary zone of iris remained imbedded in the corneal wound, forming a fine anterior synechia. Vision was restored to its normal condition.

September I, I tore the anterior synechia in the following manner: I made a small sclero-corneal incision upwards, as for iridectomy, introduced into the anterior chamber the iris-forceps of Liebreich (modified by Weiss), seized the filament, and by traction tore it from the cornea. After the operation, monocular bandage and eserine. Pupil was restored to its normal shape.

If asked whether such favorable results could not have been obtained in the same morbid processes of the cornea if treated according to the old method, we are bound to answer the question unconditionally in the affirmative. The medication would only have been more complicated, and the favorable result more dependent upon the good will of the patients. According to the old method, in all these above-named cases compressive bandaging would have been the first indication; besides rest in bed, eventually paracentesis, keratomy, An out-door treatment would have been impossible. To keep adults under compressive bandage for long at a time is difficult enough; with children this method is only rarely practicable. The difficulties in bringing about a favorable result under the old method of treatment were in such cases greater than under the new one, and the course of treatment was more complicated. Therefore the calabar-treatment is to be regarded as a real progress in the oculistic practice, because it simplifies the therapeutics, makes them more independent of the obedience and attention of the patient, and enhances in that way the chances of a favorable issue.

The greater efficacy of the eserine-treatment was tested by me in another form of corneal disease. There are ulcers which mostly appear single in the centre of the cornea, have no inclination to spread to the deeper layers, and are very circumscribed, surrounded by a small halo of infiltration. The irritation is at first more or less great, but subsides in the course of treatment, so that the eye can be opened and can bear the light. Under the usual treatment the progress of the improvement is very slow; the morbid process remains stationary for weeks. Resorption does not progress; reparation is hardly perceptible. The final result, however, is favorable, and there is no danger to the eve if it remains under the proper attention of the physician. But the patience both of the physician and the patient is subjected to a very severe test. Stimulants, such as ointment of oleate of mercury, in order to accelerate resorption, cannot be applied, because, however torpid the infiltration remains for weeks under the use of atropia and warm applications, the moment a stimulant is applied the eye responds with the utmost reactive irritation.

A case of this kind—central torbid infiltration of the right cornea of a child two years old—came under my treatment April, 1878. I treated the eye for weeks with atropia and warm applications. first irritation subsided and there was a very pronounced improvement. But soon reparation stopped, and the morbid process remained stationary. Every time I was induced by my impatience to try a stimulant, it was followed by the most severe symptoms of irritation, leading to the aggravation of the ulceration. At last I tried eserine instead of atropia. Soon reparation progressed, and in a very short time the ulcer healed, leaving but a small cica-

From this time I had opportunity to try eserine in several similar cases of torpid infiltration of the cornea, with the same favorable result.

Effective as the treatment with eserine

proved to be in the above-named affections of the cornea, totally in accordance with Weber's statements, just so ineffective was it in cases of maculæ corneæ, in which Weber reports having obtained such fine results. No case of ulceration of the cornea treated with eserine healed with a more pellucid cicatrix than I observed under the former treatment with atropia, and in no case of macula corneæ did I ever observe eserine to have any effect in clearing up the opacity and restoring the transparency of the cornea.

Eserine proved to be totally ineffective in one case of mydriasis traumatica, while in another case it was partially successful.

Case I.—A. K., driver, æt. 36, came under my treatment (March, 1878) with mydriasis traumatica of the left eye. He was assaulted four weeks previously, receiving a blow on his

left eye. On examination, I found:

The eye normal, with  $V = \frac{2}{30}$ . Jaeger 2 from 12'' - 8''. Pupil dilated beyond the medium, of oval shape. Reaction on light, consensually very slight, on reflex action and on binocular fixation a little better, but the inner half of the fibres of the iris did not participate in the contraction. I prescribed a solution of eserine, one drop of which was to be instilled every two hours. The following day the pupil was contracted to the utmost. application of eserine being discontinued for twenty-four hours, pupil became as large as on the day of first consultation. The daily instillation of one drop of eserine brought about a contraction of the pupil, the diameter of which was the same as of the right eye. But, after a treatment of five weeks, a real success was not obtained. As soon as the drug was discontinued, the former mydriasis returned, and the paralysis of the fibres of iris remained the same.

Case II.—B. M., tailor's son, æt. 8, consulted me May, 1878, twenty-four hours after the left eye had been struck with a piece of limestone. There were two small infiltrations of the cornea, the one in its upper third, the other in its centre; a small hyphæma in the anterior chamber, and a high degree of my-driasis. Pupil was irregularly dilated, with its largest curvature upwards. Reaction of pupil was consensually very slight, a little better on reflex action; but the fibres of the upper inner quadrant of the iris did not partake in the contraction. I prescribed warm applications and eserine. The infiltrations healed very soon. Pupil became contracted to the utmost. Pa-

tient read Jaeger 2 at 5".

The result of a six-weeks treatment with eserine was as follows:

The pupil (when not under the action of eserine) was round, medium dilated,

reacted consensually so slowly that it could not be ascertained if the fibres in the upper inner quadrant of the iris took part in the contraction; on reflex action and binocular fixation the reaction was quite sufficient, and the fibres of the upper inner quadrant of the iris participated, though slowly, in the contraction. But even in this condition the pupil was twice as large as the right one. The daily application of one drop of eserine brought the pupil to the same diameter as the right one. But as soon as eserine was discontinued for twenty-four hours the above-mentioned condition of mydriasis reappeared.

Whereas eserine proved to be a very efficacious remedy in the following case of paralysis of the muscle of accommodation

of both eyes:

K. B. Signer's son, æt. o, was brought to me October, 1877, for inability to see distinctly near by for several days past. The boy was pale and somewhat anæmic. The eyes appeared to be normal.  $V = \frac{20}{20}$ , with +10 Jaeger I at 10'' distance. Background of the eyes and reaction of pupils normal. No power of accommodation at all. By the nasal sound of the voice I was induced to examine his throat. It was somewhat inflamed, and the glands were swollen. The uvula deviated a little to the right side. On my questioning the mother, she told me that the boy had suffered two weeks previously from throat-trouble. It could not be ascertained whether the affection was diphtheria.

I prescribed eserine, to be used three times a day. When I saw patient, about eight days afterwards, the power of accommodation was totally restored, and he could read Jaeger 1

from 3''-12''

I abstained from any roborant therapeutics, in order to observe the pure effect of eserine. Though we are not unaware that such diphtheritic paralyses sometimes subside without any treatment, we are nevertheless permitted to ascribe in this case to the application of eserine its part of the good result.

Finally, I used eserine with good result in the following cases of glaucoma:

Case I.—C. R., baker, æt. 25, came under my treatment June, 1877, in the following condition:

Right eye.—Opaque staphyloma of the cornea in its upper third. Anterior synechiæ. Iridectomy downwards. Edges of the iris are grown in the wound. Pannus trachomatosus through the whole cornea.

Left eye.—Central leucoma of the cornea. The posterior surface is grown together with the iris in its upper half. Irregular, badlymade iridectomy downwards. Section in the cornea; the edges of the iris are grown in the

wound. Pannus trachomatosus in the upper half of the cornea.

Patient counted fingers only close by, and

was not able to find his way.

In consequence of the treatment, the eyes improved so far that the patient was enabled to resume his business in December of the same year. He went into the country, where he found employment, and I lost sight of him.

On March 6, 1878, he returned. The staphyloma of the right eye was much developed, and presented itself as a small tumor through the upper lid. The intraocular pressure of the same eye was increased. There was excavation of the optic disc. Patient suffered from a sensation of great tension in the eye and from acute pain in the temples and the forehead.

He told me that two weeks ago he consulted a country physician for inflammation of his right eye, who gave him atropia. On applying it for some days, inflammation stopped, but the pain increased; the eye became very tender; a sensation of intense tension and pressure in the eye set in, and the

small tumor began to develop.

The question whether we have to deal here with secondary glaucoma, as a consequence of the morbid alterations of the eye, which might have set in also without the use of atropia, or if atropia has only accelerated the glaucomatous attack, or was the first cause of its development, must remain an open one.

I prescribed eserine to be instilled every hour. On the second day the sensation of tension and pressure, the pain of the temples and the forehead, were gone; but there was no change in the intraocular pressure and in the excavation of the optic disc.

Eserine was applied on the second day every two hours; on the third and fourth day

every three hours.

On the fourth day, intraocular pressure was normal, excavation of the optic disc diminished, staphyloma less prominent, and vision improved. The continuation of the use of eserine (one to two drops a day) for some time caused the excavation of the optic disc to disappear entirely. The staphyloma became still smaller, and appeared through the lid as a slight elevation only. For several months the condition has remained the same.

Case II.-P. W., laborer's wife, æt. 75, came

to me July 5, 1878.

Right eye.—Chronic glaucoma, amaurosis, intraocular pressure increased, pupil dilated to the utmost, anterior chamber very shallow, deep excavation of the optic disc, severe neuralgia of the head, causing sleepless nights. The eye has been blind for two years, and is subjected to subacute exacerbations.

*Left eye.*— $V = \frac{20}{10}$ , with +10 Jaeger 6. Intraocular pressure and field of vision not abnormal. Background of the eye of suspicious appearance. Patient had previously

resisted proposed iridectomy, and still objected to any operation.

I prescribed eserine only for the sake of

trial.

On the third day, neuralgia was much diminished. Patient stated that she was better than she had been for several months, being able to sleep during the night. Pupil was a little contracted. No change in the intraocular pressure and in the excavation. On the seventh day intraocular pressure had become diminished. No neuralgia for two days.

At the end of the third week, tension of the eye was much lessened, without, however, being normal. Pupil was medium dilated. No change in the excavation. No attack of

neuralgia for more than two weeks.

Patient continued to use, irregularly, one or two drops of eserine every day. The condition of the eye, last noted, remained stationary.

When I lately saw the patient, in the seventh week of treatment, the condition of the eye was still satisfactory.

1605 ARCH STREET, PHILADELPHIA.

## OIL OF AMBER IN ANGINOSE AFFECTIONS.

BY A. R. FINCK, M.D., Philadelphia.

FOR all that is known or said of it, rectified oil of amber might as well have been retired long ago to that silent majority, the non-officinals; but I hope to suggest a use for it that may revive, at least, a measure of its ancient praises.

I should preface my clinical detail, however, by stating that the remedy has been put upon trial by me for a number of years in many cases, diverse in age, habits, circumstances,—in short, in their entire envi-

It must also be understood that in several of the cases here described the oil of amber was merely adjuvant to the general treatment of the patient's disease, and that it was expected to do only one thing,—to relieve the cardiac pain.

The question of organic or merely functional disease is not considered, as the amber is recommended only for the neuralgic element, no matter how associated or excited, except, however, that the medicine is a stimulant, and is not thought appropriate in sthenic cases and cases of "active aneurism" or ventricular dilatation with much hypertrophy.

Some years ago, when I lived in Wheeling, the brothers Drs. Cummins invited

me to see an old lady who had suffered for years from sharp stitches in her heart, which grew in violence and frequency with her age, and her bowels were habitually costive. Her physicians had failed to find an effective means against either trouble. I proposed she should take from four to six, and, if need be, from eight to twelve, drops of rectified oil of amber on a lump of sugar, melted in water, and repeat the dose every thirty to forty minutes at each paroxysm until better. So prompt was her relief each time that the agency of the amber could not have been mistaken; it also usually acted on her bowels.

Several years since, I was summoned to a patient, Miss H., aged 18, living in Pitts-

burg.

She had been declining for several years, but for eight months past had had violent palpitations; sharp stitches running through every part of her chest; dreadful cough, excited by the least movement; abundant expectoration, with occasional hemorrhages from the lungs. Her catamenia were irregular,—of late entirely absent. Her pulse was always quick. She had night-sweats, a tolerable appetite, but felt distressed by the presence of food in her stomach. In this case the ordinary rules of diagnosis went for little: everything was confused and masked. The physicians pronounced her consumptive, and the only spark of hope left was in the probable absence of hereditary taint; for her parents and five other children were in sound health.

I learned that her heart had been strained by excessive exercise when she was only seven years old, and at fourteen the nervous irritability attending her menstrual influx caused her heart to dilate largely and her health to give way. Her distress urgently demanded something for her relief, but the doctors said that opiates sickened her and destroyed her appetite, no matter how combined or disguised, and alcoholic stimulants heated her and increased the palpitation: so amber was tried, and the angina abated promptly. And then, as she was not tuberculous, the remedies addressed to her general disease, conjoined with the amber, cured her within a year.

The most notable case of all was that of J. B. K., of this city.

He had lived for some years in Alabama, where he suffered greatly from malarial fevers. He was healthy born; his age is now forty-five. Four years ago he began to cough, occasionally spat blood, and he was usually constipated. The past year his cough and expectoration became very bad, and he had several alarming pulmonary hemorrhages.

His chief suffering came from nearly constant sharp stitches through his breast, which yielded to nothing that had been given him. This was a case of enlarged torpid liver, and extreme dilatation of the heart, without hypertrophy. His cough was attributed chiefly to crowding of the lungs, the neuralgia to pressure and innutrition.

June 9, 1877, comp. podophyllin granules were given to produce a daily evacuation, a tonic mixture containing iron, sulphate of cinchona, and chlorate of potassium, and the following prescription:

R Ol. succini rect., 3iss; Tinct. digitalis, 3iii; Fl. ext. tarax., Vin. ergotæ, āā 3i; Syr. aurant cort., q. s. Ft. 3iv.—M.

Sig.—A teaspoonful, diluted, three to five times in twenty-four hours.

This treatment was pursued for six months with barely any change (except an occasional intermission of the iron and cinchona) soon after which he resumed his occupation of covering base-balls, and since March, 1878, he has been making full time. A singular and significant circumstance to which I wish to point is that in this case, on several occasions, the patient begged to have the amber omitted on account of its very unpleasant taste, but each time his distress increased, and he was just as anxious to have the amber restored. Indeed, no part of his case yielded perceptibly to the other treatment when the amber was not present to command the neuralgia.

The last case which I shall note is that of Miss Mary R.

She had a jerky cough, slight expectoration, sometimes a whitish settling in her urine, much headache, was extremely weak, had frequent severe pain in her stomach, which extended upward along the gullet, and which was little affected by eating or drinking. She sometimes vomited her food, had flatulency to an annoying degree, occasional palpita-tion, and there was just enough whirring audible upon careful listening to denote some valvular deficiency. Her eyes and her father's were more than usually prominent, but not protuberant. Her paternal great - grandmother had exophthalmic bronchocele, but the "inheritance of descent" did not manifest itself in the two succeeding generations. She had been treated for dyspepsia for several years with no success, but her family history led me to suspect that her gastrodynia was mimetic, or reflex,—i.e., that the source of trouble was in the cardiac and not in the solar plexus. At all events, when oil of amber was given her, her pain was soon relieved.

In hysterical angina also, but more particularly in that breast-pang which is the agony of deep grief, where the whole catalogue of antispasmodics proved inadequate, I have added eight or ten more drops of oil of amber to an anti-hysteric dose, and repeated it at twenty-minute intervals, with the happiest relief to the

patient.

It is my experience that there is rarely ever much progress towards health in painful affections until the pain is subdued; but as narcotics and medicines like nitrite of amyl are sometimes dangerous, and alcoholic stimulants often equally bad in cardiac affections, a remedy as safe and effective as I believe oil of amber to be should be regarded as a welcome therapeutic acquisition.

September 27, 1878.

PNEUMONIA AND CONGESTION OF THE LUNGS OCCURRING AFTER APPARENT RECOVERY FROM OPIUM-POISONING.

BY E. B. SHAPLEIGH, M.D.

IN Dr. Haynes's article on Opium-Poisoning, in the *Medical Times* for September 14, is this sentence: "From this date" (forty-three hours after ingestion of the poison) "the history of the case is one of pneumonia occurring in a consumptive. He succumbed August 18," nine days after having taken the laudanum.

This case recalls several which have come under my observation, in private practice and as coroner's physician, where congestion of the lungs and pneumonia occurred after the patients were apparently

saved from opium-poisoning.

No mention is made on this point in any book on medical jurisprudence in my possession, nor have I seen any reports of such cases: therefore I conclude that these secondary complications are not very frequent. But, as I believe death may sometimes be caused by this secondary effect of toxic doses of opium, I deem it proper to call the attention of the profession to the medico-legal importance of the question, so that careful observations may be made by those who may have opportunities of watching such cases from the beginning to the end.

Hitherto the pneumonia has been attributed to exposure incident to the treatment.

I will concisely report a few cases in which I feel quite certain exposure was not a cause.

Case I.—In 1873, a female patient of the late Dr. D. C. Lloyd had been in the habit of sending to a neighboring drug-store for large doses of powdered rhubarb. One day a careless clerk dispensed a like quantity of powdered opium, which the poor woman swallowed at one dose. The mistake was soon discovered, and the doctor summoned. After constant attention for twenty-four hours, he had the satisfaction of feeling that he had saved the life of his patient. But on the third day he found the woman suffering from an alarming attack of pneumonia, which proved fatal the next day. I made the postmortem examination, and found one lung nearly solid and the other congested.

Case II.—May 21, 1874, E. T. J., æt. 38, intemperate, took, during the day, several half-ounce doses of laudanum, as four empty phials from different stores, found in his pockets, indicated. When I first saw him, at 6 P.M., he was fully under the influence of the drug. After procuring free vomiting, I advised that he should be taken to a hospital, as he was at a house not very suitable for a man decently connected to die in. At the Pennsylvania Hospital he received prompt and skilful attention. The next day, Saturday, he seemed nearly free from opium-symptoms. On Sunday he felt quite well, and desired to leave the institution. On Monday he was attacked with congestion of the lungs, and died suddenly. The autopsy, at which I was present, disclosed excessive congestion of the lungs.

Case III.—July 21, 1877, a careful and experienced physician administered, hypodermically, about half a grain of morphia to a female patient æt. 50 years, in the evening, ignorant that she had previously taken laudanum. The next morning, when I saw her in consultation, she presented the usual symptoms of opium-poisoning. The doctor had been with her all night, and he continued his attention through the day. She rallied, and for two days seemed doing well. On the 25th, four days after my first visit, I was called again, and found her suffering from unmistakable pneumonia of left lung. After three weeks of very threatening illness, she recovered sufficiently to move to another part of the city. I believe she is still living.

Case IV.—Sept. 7, 1877, J. K., æt. 40 years, intemperate, took two ounces of laudanum. When I first saw him, it was difficult to arouse him, even partially. The treatment was successful in overcoming the opium-symptoms. Two days after, he had cough, fever, pain in the side, dulness on percussion, etc. He

recovered in a short time.

By way of explanation, I will only call attention to some of the prominent symptoms observed in most cases of opiumpoisoning: slow pulse, slow, interrupted, and noisy respiration, even as low as six in the minute. Death generally takes place from suspension of respiration from want of proper nerve-support from the brain

ENTIRE DISAPPEARANCE OF A HY-DROCELE UNDER THE EFFECTS OF SEA-BATHING.

BY L. K. BALDWIN, M.D.

R. D. consulted me in the early part of May, 1878, for a commencing hydrocele of the left side of the scrotum. As the sac was only partially filled, I advised him to wear a suspensory bandage and wait until such time as tapping should become necessary. I did not see him again until the latter part of July, when he presented himself with the sac fully distended and ready to be tapped. He had at that time just obtained a summer vacation for thirty days, which he intended spending at the sea-shore, and, fearing a tapping might interfere with his pleasure, I advised him to defer the operation until his re-turn. He was anxious to know if bathing would in any way increase his difficulty, and, being assured it would not, he took my advice, intending to have the operation done as soon as he returned in September. The next time I saw him was at Cape May, two weeks after leaving the city, and on examining the parts I found the swelling was fast disappearing, the scrotum being but half the size it was when I examined him two weeks before. He had discarded his suspensory, as he felt no discomfort from the weight of the remaining part of the enlargement. I examined him two weeks later, and found no trace of fluid remaining in the sac, there being no enlargement of the affected side save a little thickening of the walls of the scrotum.

The history of the case would seem to point to pressure as the only agent in causing the absorption of the accumulated fluid. Any one who has indulged in cold seabathing well knows how quickly the scrotum becomes contracted and corrugated, so as sometimes to make uncomfortable pressure on the testes; and with such pressure made once in twenty-four hours, as it was in this case, and continued for an hour at a time, might we not as reasonably expect absorption to take place of the fluid of a hydrocele, as in cases of other swellings and effusions where pressure is intentionally made? In addition to the pressure made by the contracted and corrugated parts, we have the hydrostatic pressure of the water in which the bather is immersed.

As I have no knowledge of any cases of like affection having been treated by pressure, I submit the above as an accidental discovery.

PHILADELPHIA 1900 WALLACE STREET.

## NOTES OF HOSPITAL PRACTICE.

## UNIVERSITY HOSPITAL.

CLINIC OF DR. AGNEW.
Reported by Abraham Morejon.

CYSTO-SARCOMATOUS TUMOR OF THE NECK -TYING OF THE INTERNAL, JUGULAR VEIN.

HE case that I have to show you now, gentlemen, is that of a man with a large painless tumor on the left side of the neck. It has been growing for seven years, and has attained a very large size, extending from the mastoid process of the temporal bone down to the sternum. Lately, by pressing upon the larvngeal nerve, it produces fits of coughing. The tumor goes deeply under the lower jaw. My impression is, from the history of the case, that it is a form of sarcoma. It may be an encephaloid, but I do not think so. I think, by the appearance of the growth, that we are perfectly justified in removing it. After making the first incisions we must proceed very slowly, and tie every vessel that presents itself before us, and free the growth from the surrounding structures. It may be that we will have to tie the carotid artery or the internal jugular vein.

The professor proceeded to operate, making an f-like incision, commencing at the mastoid process of the temporal bone, down to the sterno-clavicular articulation. The external jugular vein was then tied with two ligatures and divided between them. Then the mastoid artery was tied, and with it several other vessels which required ligation, making in all twenty-four vessels tied. The carotid artery was not involved in the tumor, and therefore was not ligated.

The tumor was removed in twenty-nine minutes. It was very large and soft. The wound was left undressed for one hour after the operation. Then nine silver-wire sutures were applied, and a cloth soaked in carbolized oil was laid over the wound; over this a bandage and two compresses.

The internal jugular vein was involved in the tumor, and had therefore to be tied and cut to proceed with the operation. Prof. Agnew stated that this case, as far as he could learn, is the only one in which the internal jugular vein has been tied at the base of the skull above the styloid process of the temperal have.

cess of the temporal bone.

June 6.—The patient, notwithstanding one-fourth of a grain of morphia, has been very restless through the night, but is quite comfortable this morning; complains of some soreness about the neck, and has a little headache and fever. His temperature, taken about 8 A.M., was 101°; his pulse 90 during the evening and 104 this morning. The dressing which was applied yesterday has not yet been disturbed. Some capillary oozing occurred some hours after the operation, but it soon ceased. Neutral mixture has been prescribed.

June 7.—Patient's temperature rose to  $101\frac{1}{5}^{\circ}$  and his pulse to 106 last evening, but he slept well. This morning the temperature has come down to 100° and his pulse to 96: he feels in every respect better than yesterday. Two doses of one-quarter grain each of sulphate of morphia were administered yesterday. He still continues to take a tablespoonful of neutral mix-

ture every third hour.

June 8.—Patient doing well. Temperature last evening rose to  $101^{\circ}$ , his pulse to 110. This morning his temperature is  $101\frac{1}{5}^{\circ}$  and his pulse 96. He complains of no pain; the wound is not much swollen, and is doing very well. The dressing was

renewed last evening.

June 11.—Patient has done very well so far, using only morphia and neutral mixture. From this time recovery went on rapidly. By June 12 all the stitches and all the ligatures but one had been removed, and by the 19th the wound was so far healed that he left the hospital. After his return home he rapidly passed on to entire recovery.

[July 1.—The patient came to see me at my house. The wound is perfectly healed, and he feels well in every respect.

August 10.—Patient called on me this afternoon. He says he is enjoying good health.]

Professor Asa Gray's election to a corresponding membership of the French Academy was by a large majority,—thirty-two votes out of forty. Mr. Charles Darwin, the other candidate, polled only five votes.

#### TRANSLATIONS.

Anatomical Diagnosis between Acute TUBERCULOSIS AND TYPHOID FEVER. - M. Laveran, at a recent meeting of the Société Méd. des Hôpitaux, endeavored to elucidate the question as to whether a certain patient had died of one or the other of the above-The point was with named affections. reference to the character of the ulceration in the intestine. M. Laveran includes intestinal ulcers under four heads: I, disseminated tubercular granulations; 2, transverse annular ulcerations; 3, ulceration in Peyer's patches; 4, diffuse tuberculosis of the large intestine. The annular ulcers are the most characteristic: to explain the mechanism of their formation it is admitted that the tubercles are developed along the line of the vessels which reach the intestine in a longitudinal direction, especially in the neighborhood of the ilio-cæcal valve. If these annular ulcers were always found in this neighborhood there could be no doubt regarding the nature of the disease; but sometimes the ulcers found do not differ from those of typhoid fever. On closer examination, however, certain differences can be discov-The tuberculous ulcers are indeed seated in the patches, but do not entirely occupy them. There are a number of small isolated granulations, and sometimes a little lymphangitis. There is no typhoid matter in the neighborhood of the patches. M. Laveran concludes that there is a particular form of intestinal tuberculosis having ulcerations analogous to those of typhoid fever and which it is impossible to distinguish from these.

THE INFLUENCE OF SALICYLATE OF SO-DIUM IN THE TREATMENT OF DIABETES.— Dr. Müller, of Kiel (Bull. Gén. de Thérap., 1878, vii. p. 142), concludes from his experience that salicylate of sodium causes the temporary disappearance of sugar from the urine, the improvement being more rapid under large doses, where these are tolerated by the patient. The average dose at first is nine to ten grammes daily (one hundred and forty to one hundred and fifty grains), but, as the effect of the salicylate diminishes rapidly, the dose must be increased to fourteen or sixteen grammes daily, in order to hope for continued improvement on the part of the patient. Salicylate of sodium can be administered in large doses and for a long time without danger. Should toxic

symptoms show themselves, these will rapidly disappear on the cessation of the medicine.

ERYSIPELAS AND MENSTRUATION. -Grellety (Cbl. f. Chir., 1878, No. 34; from Rev. de Thérap.) gives the case of a young married woman who was accustomed regularly, on the occurrence of the menstrual period, to suffer an attack of erysipelas of the face. When the flow appeared (it usually required artificial means to bring it about), the erysipelatous rash disappeared. In another case a woman of 47 was attacked by erysipelas of the face in the course of some other affection, which also disappeared so soon as the menses appeared. The author proposes to call this "catamenial erysipelas." Dal-Piaz describes a similar case in which a girl of 16 was the patient. She suffered a long time with erysipelas which disappeared during the menstrual period.

FATAL ATTACK OF MUMPS.—Rose (Cbl. f Chir., 1878, No. 34; from Corresp. f. Schweiz. Aerzte) saw a man of 20, who had double parotitis, following which an abscess filled with foul gas appeared in the left cheek. Perforation into the throat ensued, with emphysema. The patient died on the ninth day with dyspnæa without stenosis of the larynx. Post-mortem section showed pus infiltrated from the wound under the skin of the neck to the heart. The glands were changed to a stinking mass. There was a centre of gangrene in the lung as large as an apple.

CASE OF FEBRIS INTERMITTENS URTI-CATA.—Dr. Jacob Weiss communicates the following case to the Wien. Med. Presse, No. 32, 1878. A man of 21, exposed to malarial influence, was seized on June 30 with loss of strength, headache, and dizziness. On July 2 he had the first febrile paroxysm, in the hot stage of which he observed an eruption covering his body, accompanied by great burning. This was found on medical examination to be urti-None of the usual causes of this affection were present. On the following day the patient felt quite well, and the urticaria had entirely disappeared. The day after this another paroxysm of fever cam eon without a chill, and with it another outbreak of the eruption. This was repeated several days, when finally the patient was admitted into the hospital. Examination here showed a marked and severe eruption of wheals of undoubted urticaria. The patient's spleen was markedly enlarged. Under the use of quinine the intermittent fever quickly subsided, and with it the urticaria pari passu. The patient was discharged cured on July 15.

NASO-PHARYNGEAL POLYPI. — Dr. Samondès, in his thesis on this subject, says that naso-pharvngeal fibromata are most common during youth, occurring with maximum frequency between the ages of twelve and eighteen, and being rarely observed after thirty. The more nearly the patient approaches the adult limit, the more favorable is the prognosis, the less likely the return of the tumor. The practical indications for treatment are, according to Dr. S., as follows. 1. If the patient, yet adolescent, is in no immediate danger, postpone the operation as long as possible. 2. Attempt first the simpler and more direct methods, tearing, ligature, cauterization, écrasure. 3. If extirpation has been decided upon, operate so as to get a good view of the pedicle, and remember that, no matter how badly placed the tumor may be, total extirpation of the superior maxilla is never necessary. According to this, two ways of operation are alone permissible,—through the anterior nares or through the hard palate; and these prevent immediate danger, and allow frequent inspection until the period during which relapses are possible is past.

EXTRACTION OF COLORING-MATTERS.—Dr. Méhu (Bull. Gén. de Thérap., vol. xcv., 1878, No. 2) recently read a paper before the Académie de Médecine on the extraction of coloring-matters of animal origin. The method applies both to coloring-matters and albuminoids. It consists in saturating with sulphate of ammonia the liquid previously acidulated with sulphuric acid, and then throwing the mixture on a filter. The pigmentary and albuminous substances are precipitated and remain on the filter.

TREATMENT OF EPILEPTIFORM FACIAL NEURALGIA BY AMMONIO-SULPHATE OF COPPER.—Féréol (Bull. Gén. de Thérap., vii., 1878, p. 141) had a case of tic douloureux of epileptic origin, the crises almost uninterrupted, and accompanied by vomiting. All the usual means of treatment having failed, F. prescribed ammonio-sulphate of copper in solution with syrup; first in the dose of 5 grm. (80 gr.) daily, afterwards 10 grm. per diem. The patient recovered within a week.

## PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, OCTOBER 26, 1878.

## EDITORIAL.

#### STATE MEDICINE.

WE are in receipt of a circular letter from the Surgeon-General, which we endorse most heartily. The subject of it is the using of the next United States Census as a means of obtaining information concerning the average health of the people of the country, and several allied topics. For a district as large as the United States, not only one year but also one day averages fairly with another, and, taking advantage of this, it is proposed to insert queries in the census returns as follows:

ist. Number of days during past year in which the person was unable to follow his or her usual occupation on account of Disease (D) or Injuries (I). (Attendance at school considered as an occupation.)

2d. Is the person sick on the 30th day of June? if so, name disease or injury.

3d. Is the case being treated in Hospital (H), by a physician from a Dispensary or Public Charity (C), by a private Physician (P) or without a Physician (N)?

4th. Has the person during the past year had any of the following diseases? viz., Small-Pox or Varioloid (S P or V), Scarlet Fever (Sc), Measles (Me), Diphtheria (D), Typhoid Fever (T F), Malarial Fever (M F) (includes Ague, Bilious Fever, and Remittent Fever), Yellow Fever (Y F), Acute Lung Diseases (L D) (includes Lung Fever, Pneumonia, and Pleurisy), Acute Rheumatism (A R), Cerebro-Spinal Meningitis (C S M).

5th. What has been the cost to the person (or head of the family on his account) during the past year from sickness, in—

a. Loss of wages or salary?

b. Cost of medical attendance, medicines, and nursing?

The drift and value of these queries require no comment for professional readers. We need, therefore, only to urge upon the profession such activity as will lead individual doctors to influence individual Congressmen.

Another movement, of similar but of wider and more permanent scope than that just spoken of, is represented by a memorial sent to us for signatures by Dr. Busey, of Washington.

This prays for the formation of "The United States Health Board," whose duties are to be twofold. Those of first rank are strictly sanitary, such as the aiding of the Superintendent of the approaching census in the collection of sanitary and vital statistics, and the acting as an advisory sanitary board to the several departments of the general government, the Executives of the various States, and the commissioners of the District of Columbia.

The second class of duties concerns the general profession very closely. It is proposed that the board examine all who may present themselves for certificates, attesting their fitness to act as health officers or to assume the duties of practitioners. It is not intended that the board shall possess any compulsory powers, or that they shall in any direct way interfere with the practice of any one either as sanitarian or physician.

The value of such certificate to an applicant for the position of health officer is, however, so obvious that it is entirely probable that the majority of young physicians who shall intend to devote themselves to sanitary science will appear before the board. Again, a stranger settling in any district of country can offer no better proof of his professional education and skill than a certificate from a national board of examiners, free from bias of personal friendships and interest or of professional attachments and rivalries. It is possible that little by little the influence of such a board would grow until it should be supreme,—which

would be a great gain. A vearly report showing that ninety per cent, of the graduates of a certain college failed before the board would have great moral weight. On the whole, the experiment is worth far more than the thirty thousand dollars necessary to give it life, and we trust Congressmen will show some appreciation of the highest interests of their constituents.

## PROCEEDINGS OF SOCIETIES.

THE AMERICAN GYNÆCOLOGICAL SOCIETY.

(Continued from page 22.)

SECOND DAY.

R. WILSON, of Baltimore, read a paper on the "Use of the Hand as a Curette in Fost-Partum Hemorrhage," illustrated by a case where the uterus obstinately refused to contract under the usual remedies, but the scraping of its inner surface with the fingernails brought on firm and permanent con-

In the discussion, it was stated that the introduction of the hand into the uterus must be looked upon as a dangerous expedient, although sometimes necessary. Lacerations of the cervix may be thus produced, and Dr. Barker reported a fatal case of this accident, which causes post-partum hemorrhage and favors septic absorption.

Dr. R. A. F. Penrose read a paper "On the Treatment of Post-Partum Hemorrhage. which condition he had always found to yield to intra-uterine applications of common vinegar, which he recommended as being convenient, safe, efficient, cleanly, and antiseptic.

The use of the per-salts of iron was generally condemned in the discussion, as dirty and dangerous, favoring septicæmia, and sometimes causing death. Dr. Thomas believed that in a great majority of the cases uterine inertia is due to neglect on the part of the attendant. If the uterus is empty it will contract. Clots must be removed and firm contraction of the uterus secured before the physician leaves his patient, if it requires twelve hours or more to accomplish this result. Until this is done the patient is in great danger. Injections of hot water or dilute alcohol are sometimes required, and were considered as efficient as the more dangerous iron solution. No practical obstetrician should rely exclusively upon one remedy for the treatment of post-partum hemorrhage. Dr. White was pleased with the recommendation of Dr. Penrose, and intended to resort to it in the future. Dr. Barker pointed out the fact that

post-partum hemorrhage, when occurring in connection with the hemorrhagic diathesis, is especially intractable, and favored in obstinate cases the introduction of the hand and

conjoined manipulation.

Dr. Wm. Goodell delivered the president's annual address, taking for his subject the "Relation of Neurasthenia to the Diseases of the Womb." After a few introductory remarks, in which the deaths of Dr. Edmund R. Peaslee and Washington L. Atlee were referred to in appropriate and feeling terms, the special topic of the connection between nerve-tire and womb-ills was considered in a masterly manner. He declared that "mental overstrain. nerve-tire, or neurasthenia is so common a disorder in our overtaught, over-sensitive women, that in its successful treatment every physician has an abiding interest. It manifests itself by hysteria, by spinal irritation, and by a crowd of reflex symptoms, among which those of a uterine complexion often overshadow and indeed outlast all the others.

"The general pathology of such a neurosis is not clear, but it probably consists essentially in malnutrition of nerve centres, followed by disturbances in the circulation from weak innervation. The secondary disturbances consist of local anæmias and local hyperæmias. . . . The anæmia of the reproductive organs is exhibited by amenorrhœa, or by scant men-struation, by neuralgic and hysterical pains; the hyperæmia, by congestion, by dysmenor-rhæa, menorrhagia and leucorrhæa, by uterine flexions and dislocations, and by a variety of subjective and objective phenomena with which every physician is familiar."

Many disorders of the reproductive apparatus were declared to be merely the local expressions of the general neurosis, and call for general treatment. Hygienic measures are especially indicated, particularly that plan of treatment devised and first put into practice by Dr. S. Weir Mitchell, the results of which, with electricity, massage, and rest, with seclusion and good feeding, had far exceeded his expectations. Accompanying the address were the notes of a number of cases which had obstinately resisted local treatment but which by the adoption of this plan were subsequently restored to health. A detailed account of the regimen recommended concludes this most valuable contribution.

Dr. Byford's paper on "Dermoid Tumors of the Ovaries" discussed the pathology of these growths, which the author believed to be of no more frequent occurrence than in other portions of the body where their development is attended with less marked symptoms. Dr. Noeggerath, in discussing the paper, described Waldeyer's theory of involution to account for the formation of these tumors. They occur in the foetus, the virgin, the management tron, or the male, and may exist in any part

of the organism.

" A Contribution to the Study of the Treat-

ment of the Acute Parenchymatous Nephritis of Pregnancy" was the title of a paper by Dr. W. L. Richardson, of Boston, which had much practical value in regard to determining the proper period for the induction of premature labor in such cases. The albuminuria must be carefully observed and treated, but the diminution of the quantity of the daily amount of urine secreted was declared to give the signal of danger. This seems to explain why some cases of albuminuria terminate in eclampsia, and others do not. In the latter class the secretion has been maintained at an amount consistent with a satisfactory performance of the function of the kidneys. The daily quantity of such urine should be recorded. and when it falls decidedly below the average, and resists medical efforts to increase it, the patient is in danger, and labor should be brought on. This rule applies with greater force when the fœtus is viable.

Drs. Barker, Thomas, and Lyman endorsed the views of the writer. Dr. Atlee urged phlebotomy for the relief of the actual convulsions, by which he had saved many cases. He has yet to lose his first case of puerperal

eclampsia.

#### THIRD DAY.

Dr. S. C. Busey, of Washington, read a report of a case of "Alternating Anterior and Posterior Versions of the Uterus," occasioned by lateral adhesions and acting under the influence of opposite conditions of rectal or vesi-

cal distention or collapse.

Dr. Garrigues contributed a most interesting paper upon Gastro-Elytrotomy, in which the history of the operation was reviewed, and its results compared with Cæsarean section. The chairman called upon Dr. Thomas for remarks upon the paper, who stated that in the beginning he had not been aware of the operations previously reported by Ritgen and Baudelocque, or he would not have had the courage to perform it. He detailed the steps of the operation and the expedients adopted to prevent hemorrhage and septic poisoning. This operation is offered as a choice where Cæsarean section is under consideration. The cases are too few to generalize upon; but out of five cases operated upon, three mothers were saved in the city of New York, whereas there had been only one successful case of gastro-hysterotomy out of all the many operations performed there during the last two hundred and fifty years.

Dr. Byford expressed his favorable opinion of the operation, and promised to give it a

trial.

Dr. Bozeman believed that there was a serious objection from a surgical point of view. He thought that in this operation the ureter is ruptured, which would generally be a fatal complication.

This was denied by Dr. Thomas, who said that the ureter need not be encountered or injured, as had been proven by dissection upon the cadaver.

An elaborate paper was read by Dr. A. H. Smith, opposing the use of the forceps as levers by the pendulum movement of the handles.

The value of the forceps as tractors was acknowledged by those who engaged in the discussion; but it was believed that where the head is tightly gripped slight lateral movement might be serviceable, but it must be made simultaneously with direct traction.

"Rectal Alimentation in the Nausea and Inanition of Pregnancy" was strongly commended in a paper presented by Dr. Campbell, of Georgia, who reported a case where for fifty-two days no other mode of alimentation was pursued. He had demonstrated to his own satisfaction the fact that the injections traverse the large intestine and pass into the

The hour for adjournment having arrived, Dr. Goodell delivered the farewell address.

A vote of thanks to the president, and one to the secretary, were unanimously passed.

The following are the officers for 1879: President, T. Gaillard Thomas, M.D., of New York.

Vice-Presidents, D. H. Storer, M.D., of Boston, H. P. C. Wilson, M.D., of Baltimore.
Council, T. A. Emmett, M.D., of New York;

Albert H. Smith, M.D., of Philadelphia; John Byrn, M.D., of Brooklyn; George J. Engelmann, M.D., of St. Louis.

Secretary, J. R. Chadwick, M.D., of Boston.

Treasurer, P. F. Mundé, M.D., of New

York.

The following members were elected: Honorary Fellows, J. S. Billings, M.D., U.S.A., Washington; J. Matthews Duncan, M.D., of London.

Fellow, Nathan Bozeman, M.D., of New

York.

The Society adjourned to meet at Baltimore on the third Wednesday in September, 1879.

## REVIEWS AND BOOK NOTICES.

ANTAGONISM OF ALCOHOL AND DIPHTHERIA. By E. N. CHAPMAN, A. M., M.D., formerly Professor of Materia Medica and Therapeutics and Clinical Midwifery, etc. Brooklyn Evening Argus Steam Print Establishment, 1878.

On the title-page we read, "Alcohol is as antagonistic to diphtheria, as belladonna to opium or quinia to malaria." These are such brave words as to excite instant suspicion. Dr. Chapman finds that alcohol in his hands "has proved an antidote capable of saving 95 per cent. in severe epidemics." While we do not deny that alcohol may be of great benefit, we would suggest that the word "antidote" is a strong one; that Dr. Chapman has not proved that in any one of his cases it was the means of cure: that it has been long known and extensively used, as he uses it, without such remarkable success. forming, in fact, one of the main reliances in this as in other low forms of disease; and that the very fact he adduces to support his case viz., the diminished mortality returns of the last year-utterly fails to prove anything except his total inability to contend even with the simplest statistics successfully.

With equal truth might two gentlemen of Pennsylvania point to a diminished mortality or a diminished number of cases, which the tables also show—as proof of the success of their respective methods of treatment,—the persulphate of iron and the frequent and

large doses of calomel.

Let us see first from Dr. Chapman's cases what his so-called alcoholic treatment is. (P. 1.) He calls it "a plan of medication which has, after a trial of more than fifteen years, been crowned with a success that throws every other, however pretentious, into the shade." It is a modest plan, anyway. Is there anything unusual in the method of administration or in the quantity given? Let his own cases inform He claims his success from early and large doses. Now, we cannot use it before the case comes to us; and in a large majority of cases—prevalent, as all diseases are, mostly among the poor and careless-diphtheria is insidious and unsuspected till fully developed. Many recent text-books mention swelling of the glands at the angle of the jaw as an early symptom, -whereas it really occurs on the third day; or a chill is spoken of, but search in the fauces would have discovered the exudation twelve hours before. So that at best but a limited number of cases could have been treated with early heroic doses of alcohol. And when developed in all its symptoms, the diagnosis made, and the means of supporting life looked for, it seems to us that the use of alcohol is now almost traditional. It may be that as late as 1860—yes, 1876, according to Dr. Chapman-the average New York practitioner had not yet learned that alcohol was useful and could be safely given when the skin was hot and dry and the pulse rapid, as in typhoid and typhus; but we had not supposed our near neighbors to be so far behind the age.

But as to the actual amount given by Dr. Chapman: on page 30, a child aged six years took 3i every hour, afterwards 3ii every hour, and died; the parents and other children in the family took from 4 to 24 drachms per day. (Page 37,) a child seventeen months old took mxx every one and a half hours; (page 39,) a three-year-old child took 3ii every two hours; one one year old, gtt. x at a dose; and, not to take up more space, we find by going over all his cases that at nine years

Ziv every hour have been given: an adult with malignant diphtheria took "full doses, 3ss every hour, or twelve ounces a day. We leave the reader to decide whether the quantity given is anything unusual. And in all these cases quinine, iron, milk, lime-water, and sulphuric acid have been used, apparently unnecessarily, since they obtain none of the credit for Dr. Chapman's *cures*.

But the author is convinced that the reduction of 40 per cent, in the mortality of the last year (or, as he says, "after the use of alcohol") was due to the spread of his views of treatment,—a narrow view, when one considers how successful the iron treatment, the almost any treatment, was on the outbreak of 1873 in this city, and how there are to be found everywhere men of large experience ready to swear to the efficacy of chlorate of potassium, sulphuric acid, subsulphate of iron, hyposulphites, and many other remedies. The matter is too serious to be trifled with, and needs careful and painstaking investigation before appearing in print in advocacy of a new-

which is a very old-method.

Alcohol, in the author's opinion, is also prophylactic. Now, this is a new idea,—though of course in a crude way many people have been for ages past warding off contagion by alcohol, sometimes to an excessive extent. And it is a remarkable fact, corroborating Dr. Chapman, that these people generally die of dropsy or mania a potu, diseases not at all contagious, not at all allied to diphtheria; but the merit of the idea is no less truly the author's. The condition of the blood in drunkards, he tells us, is exactly the opposite of that obtaining in diphtheria. This is truly a comfortable thought for the total abstainers: by abstaining they run a frightful risk of contracting a malignant and fatal disease. we see, or Dr. Chapman sees, a strange Survival of the Unfittest,—the drunken mother who nurses her sick child running but little risk, while the sober and temperate and respectable parent, and physician too, speedily succumbs. Can we not in this way account for the relative increase of inebriates? and what, we ask, will become of free institutions when all the teetotallers have been carried off by diphtheria? E. W. W.

CONTRIBUTIONS TO THE PHYSIOLOGY AND PATHOLOGY OF THE BREAST AND ITS LYM-PHATIC GLANDS. By CHARLES CREIGHTON, M.B., Demonstrator of Anatomy in the University of Cambridge. 8vo, pp. 200. With Illustrations. Macmillan & Co., London,

The investigations described in this volume were undertaken for the Medical Department of the Privy Council of Great Britain, by way of inquiring into the causation of malignant tumors, and reprinted, with additions and corrections, from the Reports of 1875 and 1876, except the chapters on development, which

were originally published in the Journal of Anatomy and Physiology.

The first part-Physiological-includes a chapter on the periodical involution of the breast, a second on its periodical evolution, a third on the lymphatic glands of the breast in connection with the disposal of its cellular waste, a fourth on the development of the breast, and a fifth on the development of the mammary function.

Part II.—Pathological—includes two chapters on pathological processes of the breast, and a third on tumor-infection of lymphatic

glands.

The term "involution" is used by the author, after Langer, to indicate the "upfolding," or process by which the gland passes from a state of activity to rest; the term "periodical involution" being applied to the involution which succeeds each period of lactation, as distinguished from the final atrophy or disappearance of the secreting structure that occurs in women at the climacteric years. In like manner, the term "evolution" is applied to the opposite, or unfolding process, by which the gland after each period of functional rest is step by step rehabilitated with its full structure, in readiness for the next period of suckling. These inverse processes are exhaustively described as studied in the lower mammals, especially the cat, bitch, sheep, and guinea-pig. They may both be divided into tolerably definite stages, which correspond exactly in an inverted order, and are characterized by secretory products of epithelium peculiar to them. When the functional stim-· ulus of the mamma is acting at its lowest point, the secretory product is a large granular pigmented cell. At the next appreciable advance in the intensity of the stimulus, the product formed in the gland may be described somewhat generally as a large nuclear cell. Beyond the medium degree of intensity, the product is both fluid and cellular, the former being mucus, and the latter, generally speaking, a small round cell. Coming still nearer to the full excitation, the cellular ingredients are fewer and the mucous productions much more abundant. Finally, when the stimulus is at its height, the mucus-fluid has given way to a fatty fluid, and whatever cellular elements the secretion contains are the wellknown colostrum-cells. The various cellular and fluid products of the imperfect secretion are spoken of as waste products, the elaborate mechanism for the utilization and disposal of which are the lymphatic glands beneath the mammæ. One of the objects of the third chapter is to prove this. The law of secre-tion, at all times implicitly present, is taken by the author to be the law of endogenous cell formation, in which one or more cells are formed within the body of the parent

In Part II. the pathological aspect of the question is studied, and we are first informed that "the grand disease of the breast is the tumor-disease." This was studied by the author chiefly in the bitch, the tumors in which, though differing in some respects from the ordinary mammary tumors of the woman, had as a class the property of malignity equally well marked. These tumors he refers mainly to irregularities of the glandular function, and histologically of epithelial origin rather than of connective-tissue origin.

With regard to tumor-infection of lymphatic glands, considered in the last chapter of the book, the one generalization of the author from the collection of cases he has examined is that the secondary tumors of the lymphatic glands and other organs correspond in structure to the primary, even in the most minute particulars; whence he infers that the infectiveness of primary tumors is a property they develop of themselves, an "autonomy" or

'individuality.'

The simplest mode of infection is described as that in which a considerable number of cells are conveyed from the primarily dis-eased part to the lymphatic gland, where they themselves undergo a transformation to tumor cells, and at the same time induce by contact, or by some other unknown influence, a similar transformation in the proper cells of the part. Next in complexity and obscurity is where a few cells overflow into the lymphatic parenchyma and determine the transformation of all the cells of the part within a certain radius. And although in this extreme form of infection no transport of entire cells can be traced, we do not seek for any explana-tion of this infection outside of the properties of the cell, that is, in the fluids in or about the cells (Virchow), or in the "serum or intercellular substance" (Billroth). The infection implies also not only the transformation of the cells of an infected area into the likeness of the cells of the primary tumor, but likewise a co-operation among the elements of the infected parts to assume the grouping and general plan of the primary tumor.

The treatise is a creditable one to its author. Based as it is largely on the study of actual preparations whence the reasoning is physiological and legitimate, its results should not be discarded without close examination, although they may not agree with those arrived at by better-known pathologists. It is, moreover, a valuable contribution to the histology and physiology as well as pathology of the gland, and should be in the library of every pathologist and surgeon.

A TREATISE ON THE SCIENCE AND PRACTICE OF MIDWIFERY. By W. S. PLAYFAIR, M.D. With Notes and Additions by ROBERT P. HARRIS, M.D. Second American from the Second London Edition.

The elaborate review of Dr. Playfair's treatise which was published in the number of this journal for November 11, 1876, ended with the assertion, "The manual is, however, excellent throughout." No wonder, then, a new edition of the work comes so soon into the editorial sanctum. The most important addition of Dr. Harris, as would naturally be expected, is upon the subject of Cæsarean section: but even here he has evidently been profoundly under the influence of the old maxim, "Brevity is the soul of wit." It would have improved his otherwise good English if in these additions he had said not We, but I, when he meant I. Such literary prudery is always distasteful, but is especially so when it obscures the text. Dr. Harris is speaking of his own researches, but the "we" certainly leads to the natural inference that both author and editor of the book were concerned in the matter.

STUDIES IN PATHOLOGICAL ANATOMY. By FRANCIS DELAFIELD, M.D., Adjunct Professor of Pathology and Practical Medicine in the College of Physicians and Surgeons, New York, William Wood & Co. Parts I, 2, 3, and 4,—January, February, March, and April.

Except the Atlas of Dr. Duhring, we are not aware of any original work publishing in this country of the character of that before us by Dr. Delafield. It is really an atlas of pathological histology, with descriptive text, intended to include more particularly inflam-mations of connective tissue, of the mucous membranes, and of the viscera, and the structure of tumors. Each monthly part consists of from two to five full-page drawings and the accompanying text, the drawings being made by Dr. Delafield himself, from actual specimens, with the aid of the camera lucida.

Part I includes connective tissues, three

I. Flat connective-tissue cells from the fascia of a dog's leg; magnified 750 diam-

2. Branching connective-tissue cells from the tendons of a dog's leg; magnified 1500

3. Branching connective-tissue cells from the omentum of the rabbit; magnified 750

Part 2 contains the pleura, five plates:

I. Pleura of dog. 2. Endothelium and branching connective-tissue cells from pleura of dog. 3. Endothelium of human pleura. 4. Lymphatics of the parietal pleura of the dog. 5. Lymphatic spaces and connective-tissue cells from the pleura of the dog.

Part 3 contains the inflammations of the pleura, four plates:

Pleurisy of the dog, 24 hours, new cells.
 Pleurisy of the dog, 3d day, layer of cells

3. Pleurisy of the dog, 5th day, layer of

cells, new tissue.

4. Pleurisy of the dog, 7-9 days, new endothelial and connective-tissue cells.

Part 4 contains empyema, three plates:

1. Empyema in a dog, produced by a seton of 24 hours' duration; magnified 750 diameters.

2. Empyema of ten days' duration in a dog, vertical section; magnified 750 diameters.

3. Vertical section of the human pleura

empyema; magnified 750 diameters.

The drawings are carefully and accurately made, and printed in tint from lithographic plates. It is an encouraging index of the times to perceive that we have reached a stage of medical culture in this country which appreciates work of this kind. The profession, and particularly teachers of pathological anatomy and histology, are greatly indebted to Dr. Delafield for his laborious efforts in the direction of these studies. We sincerely hope he will be sustained by a prompt sale of the edition.

A PRACTICAL TREATISE ON THE MEDICAL AND SURGICAL USES OF ELECTRICITY. By GEO. M. BEARD, M.D., and A. A. ROCK-WELL, M.D.

There is something curious, if not new under the sun. On picking up the volume received from the publishers a few weeks since, its features seemed in all respects familiar; and comparison with the older volume in our library at home has failed to reveal any difference, save only that the present treatise bears on its title-page the date of 1878. Both volumes are "Second Edition, revised, enlarged, and mostly re-written." How this is, or why this is, we cannot tell.

CLASSEN'S ELEMENTARY QUANTITATIVE AN-ALYSIS. Translated by EDGAR F. SMITH. H. C. Lea, 1878.

This little book will be highly appreciated by students of analysis who have been discouraged by the voluminous works of Fresenius and Rose, and have been able to find no satisfactory hand-book for the laboratory.

The fact, mentioned in the translator's preface, that it is extensively used in the laboratories of France and Germany, is a guarantee that it will become a favorite here. lation is clear and concise, and a few very acceptable notes and additions have been made by the translator.

## GLEANINGS FROM EXCHANGES.

How to Restore the Apparently DROWNED (The Lancet, August 10, 1878).— Dr. Howard has issued the following instructions for carrying out what he terms the "direct method" of resuscitation of the apparently drowned:

1. Instantly turn the patient downwards, with a large, firm roll of clothing under the

stomach and chest.

Press with your weight two or three times, for four or five seconds each time, upon the patient's back, so that the water is pressed out of the lungs and stomach and drains freely downwards out of the mouth. Then

2. Quickly turn the patient face upwards, the roll of clothing put under his back just below the shoulder-blades, the head hanging back as low as possible.

Place the patient's hands together above

his head.

Kneel with the patient's hips between your knees.

Fix your elbows against your hips.

Now, grasping the lower part of the patient's chest, squeeze the two sides together, pressing gradually forward with all your weight, for about three seconds, until your mouth is nearly over the mouth of the patient; then, with a push, *suddenly* jerk yourself back.

Rest about three seconds, then begin again. Repeat these bellows-blowing movements, so that air may be drawn into the lungs about

eight or ten times a minute.

Remember, the above directions must be used on the spot, the instant the patient is taken from the water. A moment's delay, and success may be hopeless. As soon as the water is pressed from the lungs, all clothing should be ripped away from the chest and throat. In making the pressure, either for the removal of water or for breathing, increase it gradually and thoroughly, and suddenly let go with a jerk. With women and children use less force.

Do not stop these movements under an hour, unless the patient breathes. Be careful not to interrupt the first short natural breaths. If they be long apart, carefully continue between them the bellows-blowing movements as before.

After breathing is regular, keep the patient warm with blankets, rubbing with warm

hands, etc.

Prevent crowding around the patient; plenty

of fresh air is all-important.

Spirits and water only, in occasional small doses, may now be given: if hot, the better.

After this encourage quiet and sleep.

The first of these rules is criticised in a communication to *The Medical Times and* Gazette of August 31 by a writer who signs himself "Seaside Correspondent." He says that Dr. Howard seems to upset all former scientific theories as to the reason why men are drowned, and their state when drowned; and, therefore, how they should be treated when found drowned. He continues: "In olden time, before science dawned, the populace hung up a drowning man by the heels, let the water run off, and then they rolled him on casks. Science stepped in and forbade that the patient should be turned upside down. The new theory was that water never entered the windpipe, and that recovery could only be hoped for from attempts to restore breathing by artificial respiration. In Dr. Druitt's 'Vade-

Mecum,' for instance, I am told to let the drowned man's head hang down for two seconds, to enable any water to run out of the mouth. Even this concession to public opinion is not always found, for I see in 'Swain's Surgical Emergencies' that I am to remove from the mouth all dirt, saliva, etc., but nothing is said about water in the air-passages at all. Now comes Dr. Howard, and, if he be right, then the original vox populi was right, and patients should once more be hung up by the heels, and the body should be drained before artificial respiration was attempted. Common sense and science would work together, and excursionists and doctors might each take a share in the recovery of the drowned. Dr. Howard says, 'Press with your weight two or three times for four or five seconds each time upon the patient's back, so that the water is pressed out of the lungs and stomach and drains freely downwards out of the mouth.' Is Dr. Howard right? Has a post-mortem examination ever shown the trachea and bronchial tubes filled with water after death by drowning? Does the mechanism which prevents the passage of fluid down the windpipe fail in a drowning man? Is the man drowned because he can get no air? If so, artificial respiration seems the first consideration. But if he be drowned because the trachea is blocked with water, hang the patient up by the heels before you attempt anything else. All I ask for is decisive instruction as to 'the first step' in the recovery of the apparently drowned. I want to know the reason why, when every one says not a moment is to be lost, and Dr. Druitt will spare only two seconds to drain the mouth, and Mr. Swain not one, Dr. Howard should allow me to spend as much as fifteen seconds in emptying the drowned man's lungs.'

CASE OF LACERATION OF THE PENIS (Southern Medical Record, August 20, 1878). —Dr. A. A. Lyon reports the case of a boy, æt. 7, who, while playing, caught the penis between a nail and a link of a chain, and al-most entirely denuded it of skin. The prepuce, which, as usual in children of that age, was redundant, was unhurt. An incision was made through its dorsum from the margin down to the corona, and a corresponding one inferiorly just alongside of the frænum. It was then carried back and attached by silk sutures to the sound skin remaining at the root of the penis. The result, as seen some time afterwards, was perfect. There was no deformity: the penis was completely enveloped, excepting, of course, the glans, and the cicatrix was hardly discoverable. The operation therefore seemed far preferable to either of the plans which might have been suggested at the time of the accident, i.e., of endeavoring to replace and coaptate the true skin, or, after removing the fragments, to trust to superficial granulation without further operation.

CASE OF LIGHTNING-STROKE (The Lancet, August 17, 1878).—Mr. George Waugh reports the case of a man who during a thunderstorm had been struck by lightning, and whose history and condition were as follows. He had been attending some sheep in the fields, and when the storm was at its height had taken refuge from it under an elm-tree. Very soon after he felt something strike him behind the left shoulder, seemed to lose the use of his legs, and fell to the ground. On arriving at his house, Mr. Waugh found him sensible, but rather excited in manner, and complaining principally of numbness in his legs, and a sense of soreness over his shoulders and back generally. He was able to stand, though he had taken himself to bed. On stripping him, a very curious condition of affairs on his back was found. From the spine of the left scapula (where he felt the blow that knocked him down) extending downwards and outwards, and crossing the vertebræ about the middle of the dorsal region, extending over the right buttock, was a central stem, from which proceeded various branches, as of a tree. These consisted of a raised, ædematous condition of the skin, of a bright scarlet color, not quite disappearing on firm pressure, the central stem being about the breadth of three-quarters of an inch, and the various branches gradually thinning off to something like the scratch of a pin at their terminals. The general appearance was that of a fern, with the exception that, instead of being one frond, as in the male fern, there were about from six to eight given off from the central twig. Besides this, there was a distinct impression over each iliac region of, as it were, a single frond, each complete in itself. The whole was most beautiful and regular, just as if one had made the impression of some plant on the man's back. The man also happened to wear outside his trousers two small belts, with iron buckles, and on the corresponding parts of his legs were two distinct reddened circles, with the addition on the right leg, over where the buckle had been, of a small laceration of the flesh, which had bled rather profusely for its size. There was nothing in the man's clothing to

There was nothing in the man's clothing to account for the erratic impression left by the electric fluid. In about three days afterwards the whole affair had nearly disappeared. The terminal branches faded first, but on the third day part of the central stem, and especially towards the left scapula, was still raised, and of a bright-red color. Altogether it seemed more like a burnt surface in appearance than anything else, only the skin was nowhere

broken.

THE TREATMENT OF ACNE BY SULPHIDE OF CALCIUM (*The Lancet*, August 17, 1878).—Mr. Howard Carre details two cases out of a series of sixteen in which he has used sulphide of calcium with great success in obstinate cases of acne which had resisted other

methods of treatment. He uses it in doses of from  $\frac{1}{10}$  to  $\frac{1}{4}$  grain four to six times daily, giving at the same time a face-powder of precipitated sulphur, and paying the strictest attention to the diet. He gave it in the form of powder mixed with a few grains of loaf sugar, with directions that it be kept in a tightly-stoppered bottle. He cautions the patient not to wear metallic ornaments during treatment, as the sulphuretted hydrogen given off from the lungs and skin forms with the metals a sulphide which greatly tarnishes them.

CURIOUS METHOD OF TREATING HYDRO-PHOBIA IN MEXICO (*The Lancet*, August 24).

—The following is communicated by the daughter of a medical man. The lady is eighty-three years of age. The directions

were given to her father:

"The person under the influence of the disease must be well secured, that he may do no mischief either to himself or others. Soak a rennet in a little more than a half-tumbler of water for about five minutes; when this has been done, add of pulverized savadilla as much as may be taken up by the thumb and three fingers. Mix it thoroughly, and give it to the patient (that is, force it down his throat in the interval between the paroxysms). The patient is then to be put into the sun if possible, or placed near the fire, and well warmed. If the first dose tranquillizes him after a short interval, no more is to be given; but if he continue furious, another dose must be administered, which will infallibly quiet him. A profound sleep will succeed, which will last twenty-four or forty-eight hours (according to the strength of the patient's constitution), at the expiration of which time he will be attacked with severe purging and vomiting, which will continue until the poison be entirely ejected. He will then be restored to his senses, will ask for food, and be perfectly cured."

## MISCELLANY.

The Pith of the Dried Corn-Stalk as a Uterine Tent.—Dr. W. T. Goldsmith, of Atlanta (Transactions of the Medical Association of Georgia, 1878), takes a joint of dried corn-stalk, strips it of its cuticle, and compresses the pith, slowly and firmly, with the thumb and index finger. By this pressure it is reduced four or five times less than its original size. It has a dilating power equal to sea-tangle or sponge. The corn-stalk tent is easy of introduction. Its rigidity overcomes any slight resistance. Dr. G. has used this tent for seven years. He has not had a single accident from its use, although he has introduced it many hundreds of times.

The advantages of this tent are:—It dilates effectually, but not too rapidly. It is smooth, soft, and can be removed without force. It produces no lacerations, abrasions, or irrita-

tion of the mucous membrane. It can be medicated with any substance as easily as the sponge or cloth tent. It is of vegetable origin, and hence does not become putrid and poisonous to the patients. It may be retained, non-compressed, for days, without injurious results, if no pain occurs. A number of small tents, filling up the cervical canal, may be used for more rapid expansion. It can be prepared in a few minutes of any desired curve, size, and length. Any degree of compression may be given it, or it may be used without compression. It may be perforated, like the sea-tangle, and its power of absorption increased, by pricking its surface. - Ohio Medical Record.

TO CONCEAL THE TASTE OF QUINIA.-Dr. S. Ashhurst says that if cinchona be mixed in the proportion of one grain of the alkaloid to four grains of sugar of milk, and one-tenth of a grain of bicarbonate of sodium, it will leave no bitter taste in the mouth. The mixture may be taken dry or dissolved in water .-

Druggists' Circular.

NERVE-STRETCHING IN LEPROSY.—Dr. Edward Lawrie has stretched the ulnar nerve in thirty cases of anæsthetic leprosy. In every instance the operation was followed by benefit, so far as the area supplied by the nerve was concerned.—Indian Medical Gazette. September, 1878.

THE Chinese giant for a while was supreme in the French Exhibition, but at last a Frenchman, native of the department of Aisne, has been found to outreach him. He is seven feet two and a half inches high; and the Celestial retires heart-broken in his Oriental in-

significance.

DR. J. C. Ross reports (Cincinnati Lancet and Clinic, October 5) a case of traumatic tetanus successfully treated with chloral.

THE death of Mr. John R. Hilton, F.R.S., is announced. His best-known work is that on "Rest and Pain," but he has also published "Lectures on the Cranium," "Clinical Lectures on Surgery," "On Puncturing the Bladder per Rectum for Relief of Retention of Urine," and several papers contributed to

medical journals.

THE difficulty recently experienced in procuring experienced surgeons for the British army, in consequence of the beggarly wages offered for medical skill, has at last aroused the officials to increase their inducements. The surgeon-majors, after twenty-five years' service, are to receive \$2500 a year, besides allowances, and may retire on \$2000. A brigade surgeon is to be created, who will get \$2750 a year, or, with allowances, \$3375, being able to retire after five years in the ranks on \$2750 a year. The total pay of the Surgeon-General is to be \$6840 a year, and he will retire on \$10 a day. Every man who has not reached administrative rank must retire at 55 years of age, and the lucky ones who have won promotion retire at 60. Medical institutes are also to be established at the

larger stations.

THE London Lancet states that it is the intention of Mr. Callender, of St. Bartholo-mew's Hospital, to proceed to the United States early in December, with the intention of seeing the practice and teaching-arrangements of the distinguished surgeons of Amer-

HICCOUGH CURED BY COMPRESSION.—A case is cited from a French journal, in which hiccough which had been "incessant for fifty days" was cured in five minutes by powerful compression over the epigastrium. All other conceivable means had failed .- Pacific Medical and Surgical Journal, August, 1878.

## NOTES AND QUERIES.

Boston, October 15, 1878.

TO THE EDITOR OF THE PHILADELPHIA MEDICAL TIMES: SIR,—In answer to Dr. Brooks's questions in your number of August 31 (page 576), I will send this slip from the Boston Medical and Surgical Yournal, March 21, 1878, p. 385.

Respectfully,

JAMES B. AYER.

"The Brown-Séquard prescription for epilepsy should be

"The Brown-Beyon. written as follows: By Sodii bromidi, Potassii bromidi, ää Ziij; Ammonii bromidi, ää Ziij; Potassii iodidi, Ammonii iodidi, ää 5iss

Ammonia resqueath, 3i;
Ammonia sesqueath, 3i;
Tinct. calumbæ, f§iss;
Aquæ destillat., ad f§viiij.—M.
"Full dose: one and a half drachms before each meal, and three drachms at bedtime.
"Yours

"Yours, "JAMES B. AYER.

"March 8, 1878."

#### OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES (F OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY FROM OCTOBER 6 TO OCTO-BER 19, 1878.

Notson, Wm. M., Major and Surgeon.—Granted leave of absence for four months. S. O. 221, A. G. O., October 14, 1878.

WHITEHEAD, W. E., CAPTAIN AND ASSISTANT-SURGEON.— Relieved from duty in Department of the Missouri, and to report by letter to the Surgeon-General. S. O. 218, A. G. O., October 10, 1878.

STEINMETZ, WM. R., CAPTAIN AND ASSISTANT-SURGEON.— Relieved from duty in Department of the Missouri, and, upon expiration of his present leave of absence, to report by letter to the Surgeon-General. S. O. 218, c. s., A. G. O.

HAVARD, V., FIRST-LIEUTENANT AND ASSISTANT SURGEON.
—To report in person to the Commanding General, Department of the South, for assignment to duty. S. O. 218, c. s., A. G. O.

SEMIG, B. G., FIRST-LIEUTENANT AND ASSISTANT-SUR-GEON.—Relieved from duty in the Military Division of the Pacific, to proceed to New York City, and, on arrival, to report by letter to the Surgeon-General. S. O. 217, A. G. O., October 9, 1878.

BARNETT, R., FIRST-LIEUTENANT AND ASSISTANT-SUR-GEON.—Granted leave of absence for one month, with permission to apply for one month's extension. S. O. 93, Department of the Platte, October 14, 1878.

CUNINGHAM, T. A., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—Leave of absence extended one month. S. O. 81, Division of the Missouri, October 8, 1878.

## PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, NOVEMBER 9, 1878.

## ORIGINAL LECTURES.

LECTURES ON A CASE OF FACIAL MONOPLEGIA, ILLUSTRATING THE LOCALIZATION OF CEREBRAL FUNCTIONS AND LESIONS

Delivered at the Philadelphia Hospital BY DR. JOHN GUITÉRAS,

One of the Physicians to the Hospital, and Lecturer on Symptomatology in the University of Pennsylvania.

(Continued from page 28.)

#### LECTURE II.

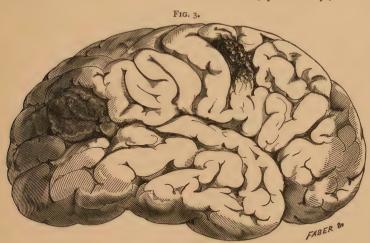
GENTLEMEN,—It is not my purpose to speak of the fruitless attempts made to save the life of our patient. He died on the 6th of October, and to-day I present for your consideration the instructive specimens removed from the body. We shall learn much from the confirmation of our anticipations in regard to the facial palsy, and also from the doubts besetting our opinion as to the lesion developed in the last days of his life.

Under the pia mater could be seen three spots of softening on the surface of the right half of the brain. Two of them appeared in the shape of slight depressions of a yellowish color, one on the middle portion of the ascending frontal convolution, the other on the right cerebellar lobe. The third was larger, of a dark color, and situated about the junction of the parietal, occipital, and temporal lobes.

The two areas of softening in the surface of the cerebrum are accurately repre-

sented in Fig. 3.

The lesion involved one inch of the length of the ascending frontal convolution. The latter had lost its crest, and the width of the gyrus at the seat of the lesion was much reduced. The area had a distinct line of demarcation. This was found below at nine-eighths of an inch from the lower extremity of the fissure of Rolando, and above at one and a half inches from the upper border of the hemisphere. Laterally the degenerative process involved the gray matter of the convolution, down to the bottom of the fissure of Rolando, posteriorly; anteriorly it ex-



I read for you an extract from the postmortem notes. *Autopsy*, twenty-four hours after death. Brain—There was some subarachnoid œdema of the convexity. No thrombosis of the large sinuses. The base of the skull was healthy. There was no lesion of the cranial nerves. The basilar artery presented two small atheromatous plates. The other blood-vessels appeared healthy. The left vertebral artery was twice as large as the right. tended in the same manner into the precentral sulcus, but also involved the base of the middle frontal convolution to the extent of one-sixteenth of an inch from the bottom of the sulcus. It also involved the lower part of the base of the superior frontal convolution; here the well-defined excavation extended in the shape of a wedge, one-fourth of an inch wide at its base, and rising three-eighths of an inch from the bottom of the sulcus.

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The patch of red softening was not so well defined. Here there was no loss of substance. It involved the posterior part of the angular gyrus, the transition convolutions, and the posterior extremity of the superior temporo-sphenoidal convolution. Over the seat of lesion I found the embolus, occluding the posterior branch of the Sylvian artery which supplies this region.

A patch of yellow softening about threequarters of an inch long, and a quarter of an inch broad, was found extending midway between the circumference of the right cerebellar lobe, and the median fissure below. Its direction was perpendicular to

the laminæ.

Cutting through the affected convolutions, the degenerative process was found not to extend much deeper than the white matter under the sulci.

The left side of the brain presented no lesion. The medulla oblongata was somewhat hard. After careful examination of the interior of both hemispheres, the peduncles, and the pons, no lesion was found.

Sections were made for microscopic examination of the basal ganglia and the internal capsule. I only found that some of the nutrient arteries showed a slight thickening of the intima outside of the endothelium.

Sections of the ascending frontal convolution at the seat of lesion, made by Dr. Formad and myself, showed numerous fragments of fibres, much granular matter, compound granule cells, margarine and stearic acid, and crystals of cholesterine,—evidences of fatty degeneration without liquefaction. A careful examination of the convolutions around the lesion proved them to be perfectly healthy, not even the seat of vascular engorgement.

The pons showed evidences of commencing sclerosis. The examination of the medulla is not yet completed; we have found here well-marked sclerosis. The spinal cord was not examined. The heart was hypertrophied, excessively dilated, and fatty. The arch of the aorta was considerably dilated up to a point just beyond the innominate. The walls appeared, to the naked eye, to be slightly atheromatous.

The aortic valves were thickened and quite insufficient. There were no vegetations nor ulcerations on the valves. The coronary arteries were decidedly atheromatous.

I shall consider first the facial symptoms.

The great questions in cerebral pathology, as illustrated by our case, may be put in the query, Why did we diagnose a lesion of the cortical substance in the region of the facial centre? and why did we suppose this lesion to be embolic in its nature? These questions must be met together, since our conclusions as to either one are important elements in our answer to the other.

I pass on to prove that the lesion could not be in any portion of the facial fibres. It must strike you at once that the facial, like other nerves, consists of two terminal expansions,—one central, in the cortex of the brain, the other peripheral, in different portions of the face; from these the fibres are gathered together into one cord,—the facial nerve. Now, can you conceive of any lesion suddenly (as was the case with our patient) taking place within the narrow limits of this nerve-trunk without disturbing all its fibres? No, gentlemen, wherever in its course the lesion may be, all the fibres existing in the nerve at the seat of trouble are involved. Some branches may have been given off above the lesion—they escape; but those fibres that continue within the trunk down to its final breaking up at the stylo-mastoid foramen must all be affected, and you must have in these cases paralysis of the subcutaneous muscles of the scalp, face, and neck supplied by the facial nerve. You start, then, in such a case, with the knowledge that the lesion is somewhere in the trunk of the nerve, because all the fibres of its final distribution are paralyzed. This information you gain at once: instead of finding, as we did in our patient, that the upper portion of the face is not paralyzed, you find that the whole of one side of the face is motionless, even to the orbicular muscle of the eye. paralysis of the latter stamps upon these affections the characteristic feature of lagophthalmus, or incapacity to close the affected eye. We had no such complete paralysis in our case: therefore, we argued, the lesion must be found above the place where the nerve emerges from the brain, above the place, in other words, where all the fibres of the facial are gathered into one cord.

Why the upper part of the face should be particularly spared in cases of central lesion, I cannot tell, but the fact is sufficient for the exclusion of trunk lesions. To this we were also led by the absence of those degenerative changes of nerve and muscle which are always present in cases of long-standing peripheral palsy; we found, in other words, no wasting of the muscles, and no loss of the electric excitability.

One other point: diseases of the temporal bone are one of the frequent sources of injury to the facial nerve. The absence of such favors the diagnosis of central lesion, especially if you can also exclude other causes that act locally upon the nerve, such as rheumatism or cold.

After giving you the reasons I had for separating this case from the class of peripheral palsies, this is, I think, the place to speak of some points in the history of the patient, bearing on the functions of the collateral branches of the facial. are given off in the transit of the nerve through the petrous portion of the temporal bone. You can readily understand how our knowledge of them enables us to localize accurately the position of a lesion in the trunk; but I desire to dwell only on the features illustrated by our case. Observe that the central lesion has spared some of the terminal branches of the nerve, viz.. those supplying the upper part of the face. Has it spared any of the collateral branches? How have they been affected? These questions are of great importance to the physiologist, because the post-mortem has revealed to us the exact seat of the lesion. I am sorry to say that our history does not speak very clearly on these points. instance, we were not able to determine accurately the status of the sense of hear-There certainly was no difference between the two sides, and I am inclined to think that the branches of the facial supplying the muscles of the middle ear were not affected.

Very singular features were found in studying the palatine branches. The uvula was drawn to the paralyzed side. This unaccountable phenomenon has been met with in other cases. I do not see how it can be explained except by supposing it to be entirely local and probably existent before the paralysis. The palato-glossus muscle of the anterior half arch, which is known to be supplied by the facial, through Meckel's ganglion, was unaffected. But the palato-pharyngeal of the posterior pillar was undoubtedly paralyzed. According to Sappey, the source of nervous supply to this muscle has not been determined. It receives fibres from the glosso-pharyn-

geal nerve, but our case would give grounds for believing that these fibres are dependent upon the anastomotic relations with the facial.

Some of the muscles of the tongue are also supplied by the facial nerve.—the digastric, stylo-hyoid, and stylo-glossus. cannot tell you whether they were paralyzed or not. I have mentioned the apparent difficulty of deglutition, but I have offered for it another explanation. should be remembered that the tongue seemed to move perfectly, that it was protruded straight, and also held straight within the mouth. At the same time we should not overlook the fact that difficulty of deglutition is one of the symptoms of central facial palsy, though, I think, only present when other nerves besides the facial are involved.

More important than any of these branches is the chorda tympani, a branch, apparently, of the facial, which is connected in some way with the function of taste. This special sense could not be accurately studied in our case, so that nothing has been gained towards determining the doubtful origin of this nerve.

Now we are ready to dismiss the trunk of the facial nerve, and to follow its fibres, from their point of egress at the base of the brain, between the pons and the medulla, up to the facial centre in the convolutions.

Observe at once the new element that comes in to complicate the symptomatology of the case. Heretofore we have been dealing with the facial nerve alone. Outside of the brain it has but one close companion,—the auditory,—and this is not rarely affected by lesions involving the facial in its course. But on entering the pons everything is changed; the facial form here but a small portion of a vast system of fibres running in all directions. The facial filaments are still gathered into one bundle until they reach the facial nucleus, situated in the floor of the fourth ventricle, between the pons and the medulla: therefore a lesion in this region must still cut off all the fibres, and the paralysis must be complete. But other fibres must be involved at the same time, viz., those I described in my last lecture as passing through the pons on their way to the medulla. I concluded, therefore, that in our case there was no lesion of the pons, because there was paralysis of no other region but the face. In fact,

lesions of the lower part of the pons give rise to cross paralysis. The rationale is very simple. Suppose the lesion to be seated in the left side of the pons; of course a certain number of fibres are cut off, which travel down to the anterior pyramids of the medulla, decussate there, and are distributed to the right side of the body: the consequence is *right* hemiplegia; the facial tracts, on the other hand, decussate *above* the seat of lesion, and they are only affected just before they emerge from the surface, in the shape of facial nerves, causing thus *left*-sided paralysis of the face.

The facial tracts have only been traced to the nucleus mentioned; we only know that they decussate above this point in the upper part of the pons, and thence pass into the peduncle of the opposite side. In the peduncle, and in its continuation, —the internal capsule,—the fibres in question bear the same relation to other fibres as in the pons, so that lesions of this region always give rise to hemiplegia in connection with the facial palsy; or, rather, the facial palsy is but one part of a general paralysis of one side of the body; the same for the body and the face, because the lesion is above the places of decussation of both sets of fibres.

One point further as to the pons. You may find it stated that Vulpian has proven that the facial fibres do not decussate in The experiment appears to be the pons. conclusive. He made a section of this body along the median line, and was surprised to find that there was no double facial paralysis. Yet there was some pare-Now, as Sappey very properly observes, a section of this kind only cuts the fibres coming from the volitional centres. and which decussate before they reach the facial nuclei; but the latter (they are indeed nerve-centres, consisting of large motor cells) are still able to carry on, through the unimpaired roots of the facial, what are probably automatic and reflex movements.

The influence of the facial nucleus probably accounts also for the incomplete character of the paralysis of the face in lesions of the internal capsule. Besides, you must remember that here the fibres are commencing to diverge, so that it is easy to understand how some of them may be affected to the exclusion of others. Please to notice, gentlemen, how, as we approach the cortex, the symptoms I describe begin

to resemble those of our case, only that we have still the element of hemiplegia characteristic of lesions of the anterior portion of the internal capsule. It is only when the facial fasciculus is sufficiently expanded to form a large area—large enough to be the sole sufferer by a lesion—that you can expect to find paralysis circumscribed to the face. You can only reasonably look for this as the result of lesions in the white substance near the convolutions. or in the convolutions themselves. this manner we came to localize the lesion in our case in the middle portion of the ascending frontal convolution.—the centre for the movements of the face.

Now let us turn to the question as to the nature of this lesion. Why did I suppose it to be embolic? The answer to this question will bring us, less forcibly indeed, to the same conclusion in regard to the seat of lesion, as the other line of argumentation; but I must say that it further enabled me to localize the lesion in the gray matter of the convolution, excluding any primary involvement of the white substance beneath; a point which cannot be determined by the other method.

I shall mention first one other point which may be considered as belonging to neutral grounds between the two lines of argument. It is this: that lesions of the pons and peduncles are apt to be hemorrhagic in their nature, and that, though they may be small, yet the sudden pressure of the blood upon the surrounding structures is apt to give rise to very serious, varied, and important symptoms besides the hemiplegia. Nothing of the kind was observed in our case.

Let us return to the embolus. lesions are more frequent in the periphery of the brain than in the central ganglia. Recollect for a moment the plan of the vascular supply to the brain. The middle cerebral artery, which concerns us mostly in the study of this case, is a continuation of the internal carotid artery; it runs in the Sylvian fissure, and breaks up into terminal branches, which pass on obliquely to the main vessel, to supply the cortex. obstacle, therefore, is offered to the passage of an embolus: in fact, the road is easy, there are no sharp turns. Precisely the contrary may be said of the branches from the circle of Willis, which dip at once into the brain-structures at the base, in a direction perpendicular to the main

vessel. Hence the comparative immunity from embolic softening of the medulla, the

pons, and the basal ganglia.

On the other hand, the latter branches, you will readily perceive, are more subject to excesses of arterial pressure, because of their proximity to the heart, and because of their immediate origin from large bloodvessels. Not only this: they are essentially terminal arteries; they do not anastomose with their companions, nor with the arteries dipping down from the cortex. so that when engorged they are not able to diminish the pressure by means of a collateral circulation. It is no wonder that these small nutrient arteries are more subject to atheroma than those of the cortex. according to the law of distribution of the atheromatous process.

And do you know what atheroma of these blood-vessels means? It means that their walls are thickened, that they present an obstacle to the circulation, that the blood will clot upon the walls, close the vessel by a process of thrombosis, and that ischæmic softening must be the consequence in the parts supplied by them. Atheroma also means that these thickened walls are weakened; that they dilate, forming innumerable miliary aneurisms, which may break at any moment, causing hemorrhage into the nerve-substance. All this may happen in the pons and basal ganglia, and is quite frequently the case in the striated body.

Now, do you not perceive that these lesions require some time for their development? No matter how suddenly the culminating point of the process may take place,—hemorrhage or thrombosis,—do you not perceive that its gradual development must give rise to some symptoms? You may have sleepless or dreamful nights, headaches, noises in the ears, vertigo, numbness of the extremities, slight impairment of motion, or other premonitory signs. I have a patient who for one year previous to an attack of hemorrhage into the brain complained often of being sick only in one side of the body. If he caught cold it was in the right side of the body that he felt the general symptoms, and it was the right nasal chamber that became most affected. Another patient had two attacks of acute transient cedema and numbness of the right arm within six months of an attack of right-sided hemiplegia. Our patient had no such symptoms. In his case, the blood-supply to a portion of the cortex was suddenly cut off by a small clot washed away from the cavities of the heart. The embolus followed the readiest course, and was finally lodged in one of the terminal branches of the Sylvian artery.

I need not tell you why hemorrhages are rare in the area supplied by these branches: it is simply because their plan of distribution differs in every respect from that of the central ganglia. You perceive, then, that we also had direct evidence in favor of the diagnosis of embolism, and, in this, a support for the theory of cortical lesion,—a lesion including the gray matter, because when one of these peripheral branches is occluded you are very apt to have a patch of softening, conical in shape, and with the base to the periphery.

Did the embolus follow, in this case, the most usual course? Not exactly; and I think I can give you the reason for this deviation. Emboli are much more frequent in the left than in the right middle cerebral artery. In trying to account for the exception in our case, bear in mind that to understand the vascular disturbances of an organ we cannot investigate too broad an area of the vascular system. The theory upon which is explained the frequency of left-sided embolism is, that the left carotid arises nearer the apex of the aortic arch than the innominate, and about the place where a small fragment would strike the upper wall of the arch in its way from the left ventricle. In our case the aorta was dilated up to a point just beyond the innominate, so that the latter was situated at the apex of the expansion. It is also worthy of notice, I believe, that the attack occurred probably at night, when the patient was lying upon the right side, as he was always obliged to do. We should also note, though we may fail to see its bearing upon this question, that the left vertebral artery was much larger than the right.

Finally, I also found in the condition of the heart, reasons to exclude the diagnosis of cerebral hemorrhage. It is often the case in atheroma of the blood-vessels, that the heart also becomes degenerated. This weakness of the left ventricle is to be looked upon as a safeguard against high arterial pressure and rupture. In our case we had also a safety-valve action in the aortic regurgitation.

(To be continued.)

## ORIGINAL COMMUNICATIONS.

ORGANIC AND FUNCTIONAL AN-ÆMIA, AND MILK-TRANSFUSION AS A REMEDY.

Read before the Philadelphia County Medical Society, October 9, 1878,

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HE vast importance of anæmia is now fully recognized. Even without having attained to a complete knowledge of the physiology of the blood, or of its exact relation with the tissues, we are in possession of sufficient information on these subjects to enable us to appreciate the importance of the deprivation of blood from limited areas (local anæmia) or of the depravation or deficiency of the mass of blood (general anæmia). We are familiar with the general results that follow anæmia, depending directly on interference with the nutrition and function of one or more organs. Among the more important structural changes are atrophy and fatty degeneration, affecting walls of vessels, or muscular, gland, and nervous tissue. Many hemorrhages and dropsies are incident to these conditions. Among the innumerable functional disturbances that follow anæmia, it would be tedious to more than refer to the digestive disorders; the marked feebleness and instability of circulation; the severe nervous phenomena; the failure of muscular strength in every part.

Nor is it possible to enumerate the infinite variety of causes that lead to anæmia, though, as I shall be compelled to allude frequently to different forms of anæmia this evening, I may be pardoned for attempting to define the several great groups into which most cases may be divided.

Anæmia is frequently functional. By which term we should here understand that it is due to depressing causes of a temporary or remediable nature, unassociated with severe organic disease. Such causes are profuse or repeated hemorrhages; deficient food; dyspepsia; diarrhæa, or other exhausting discharges, etc. The changes in the blood in such cases are rather of quantity than of quality; that is to say, they consist in a reduction in the total mass, or in the proportion of red globules, rather than in any change in the vital qualities of the blood. It is true that if

such cases are intense and long-continued, grave secondary results (such as fatty degeneration of the heart) may follow; but if before that late stage is reached the cause is removed and proper remedies are applied, the anæmia will disappear, and health be restored.

Under the head of organic anamia we meet with two entirely distinct classes. In one the anæmia is consequent upon organic disease of some important viscus. Such is the intense and progressive anæmia that attends fully-developed pulmonary phthisis or rapidly-growing carcinoma. It usually appears that the organic disease precedes the anæmia, and that the development of the latter depends upon the progress of the former. It is, however, uncertain how far, in such cases, the disease acts merely as any other drain would, appropriating so large an amount of albuminoids and salines as to starve the other tissues, including the blood; or how far the nutrition and vital qualities of the blood are specially interfered with by the pre-existence of some morbid principle. or by the resorption of some septic material.

But such cases differ widely from the other class of anæmias to which the term organic or essential is strictly applicable. Here we observe, as the first symptom of disease, a progressive and apparently causeless anæmia. There is not merely a deficiency of the total mass of blood or of the red globules, but there are associated changes in the structure and development of these globules, or in the number and properties of the white corpuscles. With these blood-lesions coexist grave changes in various tissues which physiology teaches us are intimately associated with the development and maintenance of the blood. At present we recognize, as belonging to this category, the medulla of the bones, the spleen, and the lymphatic glands, and in addition, perhaps, the minute centres of lymphoid structure scattered through the substance of organs. Here, then, is certainly an essentially distinct group of organic anæmias, the peculiarity of which is that there is not merely partial bloodlessness from some definite cause, but that there is a primary interference with the elaboration of the blood. Leukæmia, pseudoleukæmia, and progressive pernicious anæmia may be mentioned as the generally recognized members of this group. In a

former communication, I have suggested the name anæmatosis (defective elaboration of blood) for this important group of affections, and I still incline to regard it as rather a desirable term, since it expresses the one essential condition which they possess in common. Undoubtedly at some future day, when the pathology of the blood and of the organs concerned in hæmatosis is better understood, more exact names can be found for the various forms of blood-lesion; but for the present, while we still are in doubt as to the mode and place of development of the blood-globules. as to their transitional forms, their exact relation with the white corpuscles, their stages of disintegration, and the place of their destruction, we must be content with a general and vague nomenclature for the diseases of the blood. Some doubt exists as to the precise significance of the changes that have been noticed in the spleen, the lymphatic glands, and the medulla of the bones in cases of anæmatosis; and particularly in regard to the latter it has been suggested that the marrow-lesions may be consequent upon and induced by the profound alterations in the blood. But, as in well-marked cases there are evidences not merely of atrophy and fatty degeneration in the elements of the marrow, but of a distinct process of proliferation of certain cells, we must probably admit the existence of an active irritative process. We may therefore for the present, as it seems to me, continue to speak of a splenic, lymphatic, and medullary form of leukæmia and of pseudo-leukæmia, or of anæmatosis.

It is needless to say that the possession of clear and accurate ideas on the nature and pathology of anæmias would vastly assist us both in prognosis and treatment. In the cursory remarks I have made this evening I have not attempted to discuss these important questions, but merely to introduce the histories of two interesting cases of anæmia, in both of which transfusion of milk was practised.

Case I.—C. D., at. 32, was admitted to the University Hospital with extreme anæmia and intense spinal irritability, but without any organic disease. These conditions were of long standing, and had been induced by a remarkable series of depressing influences. The condition was further aggravated by the habit of using daily large quantities of morphia. She was treated assiduously for several months without any effect. Rest, generous diet, large doses of various forms of iron,

gradual withdrawal of morphia, were assiduously used, but the anæmia remained equally intense, debility was extreme, and the nervous phenomena were as marked as ever. I consequently decided to have transfusion per-formed, and at my request Dr. C. T. Hunter, who performed all the operations referred to in this paper with his accustomed skill, introduced about f zv milk into right median basilic vein on June 20, 1878. The cow was brought into the basement of the hospital, and the patient was placed in a room close by, so that the milk should be perfectly fresh. The apparatus consisted of a sharp-pointed canula to be introduced directly into the exposed vein, without having previously laid it open, and a small glass funnel, which was connected with the canula by a rubber tube. The apparatus was filled with milk, previously heated in a water-bath to the temperature of 100°; the canula was inserted into the vein, the funnel was held at an elevation of about twenty inches above the arm, and the milk was allowed to flow slowly in by hydrostatic

An hour previous to the operation she took twenty grains of quinia, so as, if possible, to guard against a chill. As soon as the milk began to enter, there appeared violent capillary congestion of the face and surface of the body. The eyes were injected and prominent, the lips turgid, and the whole expression wild and alarming. The respiration was labored, and an intense sense of oppression was felt, the patient clutching at the throat in her distress. While these symptoms were so severe, the funnel was lowered, and the flow of milk arrested for a few seconds, when, as she became easier, it was resumed. Eighteen minutes after the operation there was a sudden outbreak of urticaria, the wheals being large, prominent, and pale-reddish. They disappeared in a few minutes, but ten minutes later were followed by a second eruption of the same kind and of equally short duration. The changes in the pulse and temperature were carefully noted. At the time of the operation the pulse was 108; and by the time the milk began to flow in, it had run up to 120, from excitement. It then quickly fell to 108 during the entrance of the milk. But in about five minutes after the operation, violent excitement of the circulation returned, the pulse ran up to 150 and then soon fell again, being 128 when the urticaria appeared, eighteen minutes after the operation. In twenty minutes more it had fallen to 92, at which time a severe chill began. For several hours afterwards it remained at about 95.

The temperature did not vary during the operation, but when, forty minutes afterwards, the chill occurred, it rose pretty quickly to 103° F., and then slowly fell during the next six hours

six hours.

She passed a comfortable night, and the following day was in her normal state. The

urine contained neither albumen nor sugar:

sp. gr. 1020.

This operation was not followed by any decided improvement in her general condition, and one week later it was decided to repeat it.

Previous to the operation she took twenty grains of quinia, so as to obviate chill. She was in an exceedingly nervous condition. vein was exposed in the left arm and an ounce of milk thrown into the circulation. The first drachm caused a great deal of flushing of the face and capillary congestion of all the body. This was followed by a great deal of pain about her head, so that it was thought best not to allow any more milk to flow in. After the milk ceased to flow she had great pain about her uterus, with cramps about the whole pelvic organs, resulting in an immediate premature appearance of her menstrual flux. The quantity of quinia that she had taken succeeded in a measure in keeping down her temperature. She had two attacks of urticaria, but no decided chill. No albumen in the urine passed after the operation. She complained of much pain in her head during the rest of the day.

June 28.—Passed an uncomfortable night, but feels somewhat better this morning. Looks very puffy about the eyes.

June 29.—Feels much stronger and able to

sit up.

July 3.—Condition seems to be improving

slowly.

July 17.—It was decided to repeat the operation of transfusion. The milk was procured as on the former occasion, and the same instrument was used. About six ounces of milk were slowly thrown into the circulation, with exactly the same chain of symptoms as on the former occasion, causing a violent congestion of the capillaries and of the uterus, bringing on the menstrual flux, intense pain in the head, and in three-quarters of an hour a chill and an increase of temperature. was lowered by quinia. There were There were also nausea and vomiting.

July 18.—Feels easier, but much pain in head.

In the course of a few days she began to present decided though gradual improvement, She gained in color and in strength, was able to take more nourishment, and slowly to diminish the daily amount of morphia. this time her improvement progressed very much more satisfactorily than before.

It would appear, then, that in this case of extreme and long-standing anæmia, not connected with organic disease, but in which all other means of treatment had failed, milktransfusion thrice repeated was certainly productive of considerable benefit. The symptoms attending the operation were severe and even somewhat alarming, but were probably much aggravated by the extremely nervous condition of the patient, and were not followed by any unfavorable results.

Case II. was an English sailor, æt. 33, suffering with intense progressive anæmia, attended with marked bronzing of the face, extreme muscular debility, palpitation of the heart, and occasional apparently causeless attacks of vomiting. Repeated thorough examination failed to discover the existence of any organic disease. There was no albuminuria. Marked remissions in the severity of the symptoms occurred. During one of these, he left the University Hospital, December, 1877, to attempt to do light work. The history of the case up to that point has been already published (*Phila. Med. Times*, 1877). As it is not essential for my purpose this evening, I do not reproduce it, and will reserve the minute account of the conclusion of the case for a future publication. He was readmitted to the hospital, May 6, 1878, in a state of extreme debility, and suffering with diarrhæa. This was soon checked, but his debility and anæmia were intense. A microscopic examination of his blood (Malassez's method), by Dr. J. G. Richardson, gave only 1,112,500 red globules to the cubic millimetre (little over twenty-five per cent. of the normal proportion): the proportion of white corpuscles to red was not increased, perhaps even somewhat reduced, being 1 to 643.

Despite absolute rest, carefully regulated diet, and the use of opium and various astringents, attacks of diarrhœa recurred, he lost flesh, and became even more anæmic. Urine still contained no albumen. There was a soft hæmic murmur over base of heart, and along pulmonary artery and in veins of neck. Intravenous injection of milk was decided on, and on June 15, f3vi were allowed to flow into the left median basilic vein. The first effect was marked flushing of the face, with a feeling as though the head would burst. The stomach rejected its contents, and there was a strong desire to defecate. There was not any great sense of respiratory embarrassment.

The record of the temperature and pulse

was as follows:

	TIME. 12.35 Temperature before oper-	Темр.	Pulse.	
	ation Immediately after	9930	104 84	
-	12.45	9950 9950 9820	116 120 Fuller stronger.	and
	1.15	9820	130 Fuller stronger.	and
	1.20 Feels more comfortable. 1.30 Begins to feel chilly, and	98½0	116	
	head aching.	98½°	116	

Had hot bottles applied to side; took ten grains of quinia and one-fourth grain of morphia.

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1.40 Had decided chill.
                                               9930
                                                          136
1.55 Feels more comfortable.
Chill lasted for 20 min-
                                              1000
2.10 Dozing
2.15 Thirsty
                                                          123
114 Weak.
                                              10130
                                               10250
                                                           110
3.05 Took 10 gr. quinia.
3.35 Pain in left arm and hand.
                                              10250
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TIME.	TEMP.	Pulse.
4.05	10140	108
4.35 5.00 Sweating.	10140	96 Stronger.
	10130	94
6.00	10040	98 More volume.
-7.00	10010	96
8.00	10050	94 Much fuller.
0.00	T0020	

June 16.—Passed a comfortable night; slept without any additional narcotic, and feels much stronger. Temperature, 99°; pulse, 98;

urine not albuminous.

During the next few days he seemed decidedly stronger than he had been, and expressed himself as feeling better. He was able to be out of bed and to walk about a little, and apparently there was a slight improvement in the bloodless state of the skin and mucous membranes. One week subsequently, f\( \frac{7}{2} \text{viii} \) of milk were injected into right median basilic vein.

One hour previous to the operation he took twenty grains of quinia, so as, if possible, to guard against a chill. The same instrument was used as on the former occasions, having been kept in a solution of carbolized water

for twelve hours previous to use.

After the canula was inserted, the milk was allowed to flow very slowly. Time, 11.20. Pulse, 135, small and weak. Pulse slowly fell to 128 at the end of the first minute: then to 112 at the end of the third minute. Pulse, 114, and much stronger, temperature, 984° at the end of fifth minute. Temperature of milk, 100°. 11.35.—Length of operation, five minutes. Quantity of milk thrown in, eight ounces. 1.00.—Began to have a chill; temperature, 102\frac{2}{5}°. Chill lasted for about twenty minutes; temperature went up to 103°. Took ten grains more of quinia, and soon afterwards temperature began to fall. He passed an easy night.

June 21.—Feels somewhat stronger. Urine examined, and found to contain a large quantity of albumen, which disappeared on the

second day.

June 25.—Presents a puffy appearance about the face and under the eyes, but feels quite

June 27.-A week after the second operation, f 3 vi fresh warm milk were injected into the median cephalic vein. The operation was attended with the same marked capillary congestion, sense of oppression and of distention in head and chest, nausea, and vomiting, as before, and was followed by a decided chill, lasting twenty-five minutes, for about fifteen of which he was perfectly blind, not being able to distinguish the slightest object. gradually diminished with the chill. After the chill the temperature began to rise from  $101\frac{1}{2}^{\circ}$ , and reached its maximum, 1032°, about three hours after the operation. It then began to fall, and in three hours more was down to 1012° He complained of being very nervous, and of having a great deal of pain about his head.

June 28.—Urine contained a great deal of albumen and many phosphates. His temper-

ature did not fall as quickly as after the former operations. In the morning it was 102° and went up until evening, when it reached 104°. Pulse, 120. Was put on ten grains of salicylic acid every three hours.

June 29.—Feels somewhat easier. passed in last twenty-four hours ten pints of urine highly charged with albumen. Complains of much pain about the base of both

lungs and in his right elbow.

June 30.—Quantity of urine has diminished to three pints in twenty-four hours, and contains still a small amount of albumen. No tube-casts are found. Temperature has a tendency to run high, but is controlled by salicylic acid. There is impaired expansion and resonance over lower lobe of right lung. There are also fine crackling râles of ædema over the lower parts of both lungs.

No jaundice occurred after either operation. July 1.-Kept sinking all through the day, and had a great deal of pain about the base of the lungs, and expired about seven o'clock.

At the post-mortem examination the brain could not be examined. The heart was flabby. and its walls had undergone marked fatty degeneration. The lungs were adherent throughout; there were several small cheesy nodules at the right apex. No spots of infarction or metastatic abscesses were found, but the lower lobes were intensely congested and ædematous.

There was a small collection of pus in the

right elbow-joint.

The walls of the stomach and intestines were thin, and the mucous membrane was especially thin, but without ulceration.

The liver was somewhat fatty. The spleen and pancreas were normal. The supra-renal capsules were converted into mere sacs, but had not undergone the characteristic changes of Addison's disease. The kidneys presented a positive but slight degree of thickening of the interstitial connective tissue, especially around the Malpighian bodies.

The semilunar ganglia of abdominal sympathetic nerve were normal. The marrow of the long bones presented distinct but not extreme alterations of the character found in

medullary anæmatosis.

In this case of progressive organic anæmia it will be seen that intra-venous injection of milk effected no material relief. After the first operation it is true that there seemed to be a temporary improvement, but only to a slight extent; while after the second transfusion grave symptoms ensued, and it cannot be doubted that the fatal result was hastened by the operation.

The subject of transfusing nutritive fluids in cases of extreme anæmia or exhaustion has received an immense amount of attention of recent years. The investigations have been chiefly directed to the use of human blood, whether defibrinated or not. Recently Dr. T. Gaillard Thomas has recommended fresh cow's milk as a substitute for blood. The advantages that may be claimed for it are that there is no danger of embolism, as in the case of bloodtransfusion, from small bits of fibrin, and that fresh milk is much more readily obtainable under ordinary circumstances. At the same time it would appear, from the limited number of cases in which it has been used, that it possesses to a considerable degree the same power as does blood of stimulating circulation and nu-The two cases whose histories have just been read are interesting as a contribution to the clinical study of this important question. The following points may be regarded as settled in regard to blood-transfusion:

That, excepting when direct transfusion can be dexterously performed, carefully defibrinated blood should be employed.

That the amount injected at any one time should not exceed f3v to f3vij, and that it should be introduced very slowly.

That severe and even very dangerous symptoms (of disturbed nervous and vascular action) are liable to occur during or soon after the operation.

That albuminuria may follow the opera-

tion

That the transfusion of blood is capable of stimulating powerfully the circulation and nutrition for a short time, and may thus be used to save life in cases of exhaustion from profuse hemorrhage.

That it may also be employed legitimately for temporary relief in cases where extreme anæmia and exhaustion have resulted from a serious but curable functional disease, in order to gain time for curative measures. As illustrations, I may cite the instances of intense dyspepsia, gastric ulcer, chronic diarrhœa or dysentery, hemorrhage in typhoid fever.

That in cases of incurable disease, such as advanced pulmonary phthisis, cancer, or anæmatosis, transfusion of blood exerts no curative effect, and the attendant risk is too great to justify its performance.

In an article on Progressive Pernicious Anæmia (American Journal of the Medical Sciences, October, 1875), I described a case in which transfusion of blood was performed at an advanced stage of that disease. The unfavorable result agreed en-

tirely with the statement above made. I am indeed inclined to believe that the risks of transfusion are greatest in cases of pulmonary phthisis, where the respiration and pulmonary circulation are impeded, and of organic anæmia, where the mass of blood has been reduced, and where the heart is weak and probably fatty.

In comparing the effects of transfusion of milk with those of transfusion of blood, it may be concluded from the experiences

already recorded:

That the milk must be just drawn from the cow, and be kept at a temperature of about 100° F.

That the quantity used should not exceed f3vi; since it has been seen that even much smaller quantities than this may

produce severe symptoms.

That these symptoms appear to be quite as severe and of the same character after transfusion of milk as after that of blood, although the danger of embolism is excluded to a great extent.

That albuminuria may follow the operation, though this has been actually shown to occur only in a case where slight dis-

ease of the kidneys existed.

That transfusion of milk undoubtedly exerts a powerful and instantaneous stimulating effect on the circulation and on nutrition, and may be used therefore instead of blood in cases of profuse hemorrhage, etc.

That it is still doubtful whether, in cases of intense anæmia connected with serious but curable disease, transfusion of milk, although doubtless of much service, produces as lasting an effect as is obtained when blood is used.

That the severe symptoms following the operation, and the possible dangers attending it, render it improper to perform it in such cases until all other remedies have failed.

That in cases of serious organic anæmia the operation may hasten a fatal result, and that consequently, as its beneficial action, even if the operation is most successful, can only secure a temporary improvement, its performance is not justifiable in such conditions.

A LEPERS' hospital is about to be established in the Spanish province of Alicante. In the province of Valencia there were last year 116 cases of leprosy, 71 of which proved fatal.

## NOTES OF HOSPITAL PRACTICE.

COLLEGE OF PHYSICIANS AND SURGEONS, NEW YORK.

CLINIC OF PROF. ALONZO CLARK.

(Reported for the Philadelphia Medical Times.)

SUBACUTE PERICARDIAL EFFUSION—IMPACTION OF FÆCES IN THE COLON,

ENTLEMEN,—Our first patient to-day is a young man, who tells us that five weeks ago he had some sort of a febrile attack, which he did not seem to mind very much, but that about a week after he was first taken ill he became a good deal worse, and suffered great pain in the left side of the chest, extending from the region of the heart up to the shoulder. He was in bed about eleven days altogether, after which his physician encouraged him to get up and go out. He denies that he had rheumatism either at this time or at any former period. As a result of the attack that he has had (which was undoubtedly one of pericarditis), he still suffers a great deal from shortness of breath, and he says that he had to get a friend to assist him in coming up the stairs here, and yet was obliged to stop and rest several times on the way up. He is also entirely unable as vet to lie on the left side. This seems to have been an exceptional case, as far as the pain was concerned, as pericarditis is ordinarily by no means a painful affection.

When the patient is stripped, the first thing that attracts the observer's attention is a marked enlargement in the region of the liver, and to that we shall have to turn our attention presently. The left breast stands out considerably more prominently than the other one; but the apex-beat is undisturbed, though the impulse is somewhat feeble. The heart is beating pretty rapidly; but the sounds are quite indistinct. I do not detect any murmur; but still a murmur might exist without my hearing it, because the sounds themselves appear so muffled and distant. I also practise auscultation behind here, for the reason that once in a while we meet with a pericardial effusion which compresses the lung back of it to such an extent as to cause a certain amount of condensation in it, which gives rise to more or less dulness on percussion and bronchial breathing. A medical friend of mine was recently deceived by such a state of affairs, so that he thought he had a case of real pneumonia to deal with.

As indicative of pericardial effusion still remaining, we have an increased area of dulness in the pericardial region, and, at the same time, marked indistinctness of the apex-beat. If the increased area of dulness were due to hypertrophy, instead of this condition, we would have the beat more distinct, instead of less so than nat-But in addition to the above there ought to be a sign which is entirely characteristic, if there is pericardial effusion here, viz.: the area of dulness would extend up to the second intercostal space. Now let us observe if this is really the case. You notice that when I make percussion as high up as this, somewhat to the left of the median line, I get well-marked resonance; but that when this is done near the latter, there is found to be dulness all the way across the second rib and into the first interspace. The explanation of this is found in the pear-like shape of the pericardial sac.

I have already called your attention for a moment to a swelling of some size in the region of the liver, and I think it would be well now to make some examination as to its character.

In the first place, careful percussion shows us that the line itself is not enlarged. and we must, therefore, look for some other cause of the tumor present. What we do find is a band of dulness, perhaps four inches in width, extending across the epigastrium, and, from its position and outline. I have but little doubt that it is the colon distended with fecal matter. On palpation, the mass can scarcely be said to be actually hard, and yet it does not yield much to pressure. If this is really the cause of the swelling noticed, a couple of ounces of castor-oil will probably cause it to disappear. In one case of this kind, occurring in the person of a medical friend of mine, I kneaded the parts with my fingers until I got the fecal mass started, after which there was an evacuation of nearly a bucketful of the intestinal contents.

Aside from the effusion, there is no great amount of heart-disease here. The remarkable part of the case is that the patient had at first, and still has, so much pain; for he still continues to suffer in this way. In nine cases out of ten there is no pain. Another point of interest about it

is the unusually large pericardial effusion. The latter has now lasted so long that it will probably become chronic. of treatment we should try first to set the kidneys at work so actively that the effusion may all be carried off by their means. Should we fail in this (and I think it not at all unlikely), we shall have to resort to puncture of the pericardium. This is not a very old operation, but it is still always reserved as a last resort, on account of the danger of wounding the heart. In quite a number of instances it has been done very successfully, and it is certainly an altogether justifiable operation.

In chronic pericardial effusion the fluid, as we would naturally expect, is almost always of a sero-purulent character. I once had a case in which a gallon of it was found contained in the pericardium at the autopsy. It is recorded in the books of the New York Hospital, and is the only one that has ever been reported, as far as I know, in which there was such an enor-

mous amount of fluid.

## TRANSLATIONS.

CURE OF ONYCHIA MALIGNA.—Dr. Gaetano (Jour. des Sci. Méd., 1878, p. 463; from Il Morgagni) was called to a little girl 10 years of age who had suffered horribly for six months with peri- and subungual ulceration of the right index finger. Having softened and raised up the nail as much as possible, he dropped a concentrated solution of morphia upon the sore, with which he kept it in contact a quarter of an hour. He then covered the diseased part with very finely powdered nitrate of lead, and enveloped the finger with a band-The pain was almost immediately relieved, and the patient slept soundly that night for the first time in a long period. The bandage was removed at the end of five days, and the ulcer was found about one-half healed. The application was repeated, and by the end of five days more complete cicatrization had taken place. In two other cases results as favorable were obtained by Dr. Gaetano, the applications being made more or less frequently as the case seemed to demand.

Pulmonary Emboli in Tumors of the Uterus or Ovary.—A. Sevestre (*Le Progrès Méd.*, 1878, p. 707) reports a case of ovarian tumor in which death occurred

from embolism, and adds some reflections upon the case in connection with others reported previously. His conclusions are as follows:

r. Tumors of the pelvic cavity, even where benign, may favor the production of thromboses in the crural veins by compression, and the clots formed in this neighborhood may be the point of departure of pulmonary emboli.

2. The accidents produced by pulmonary emboli may subside, and life may persist even where considerable portions of the

pulmonary artery are obliterated.

These facts, adds M. Sevestre, should not be lost sight of; for although pulmonary emboli may be upon the whole rather rare, considering the great number of intra-pelvic tumors, yet they are of importance on account of their gravity. x.

IODIC PURPURA.—M. Labat reports the case of a woman suffering with chronic rheumatism, who took several doses of iodide of potassium, amounting in all to about fifteen grains. Within twenty-four hours a petechial eruption showed itself, presenting the characters of jodic purpura as described by Fournier, namely: 1. The eruption was purely petechial, without other lesions. 2. It was seated upon the legs alone, and upon their anterior aspect. The eruption was abundant, non-confluent, composed of small maculæ, and without concomitant symptoms, local or general. 4. Its evolution was rapid; it had entirely disappeared by the end of four days. 5. It was produced immediately upon the ingestion of a very small dose of the iodide. (La France Méd., 1878, No. 72.)

Poisoning by One-Third of a Grain OF CORROSIVE SUBLIMATE.—Dr. Kobryner (Bull. Gén. de Thérap., v. 2, 1878, p. 75) gives the case of a young man of 21 under treatment for syphilis. Tiring of the too stringent regulations of his physician, and hoping to make a speedy cure, he took without medical sanction two pills of corrosive sublimate containing one-sixth of a grain each. A little later the man was taken with intolerable burning pain in the stomach and abdomen, and vomiting. became small, his extremities cold, and face pinched. There was no salivation. He was ordered iron by hydrogen (which was vomited), together with albumen. For ten hours the toxic symptoms persisted, but then began to diminish, and the patient recovered.

# PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, NOVEMBER 9, 1878.

## EDITORIAL.

DR. GRISSOM'S CHARGES AGAINST DR. HAMMOND.

DERSONALITY in journalism is to be reprobated, but it is possible for a physician to attain such eminence that his character is no longer a private but a public possession, the whole profession being honored or dishonored with him. Such high station certainly has been reached by Prof. Hammond of New York, and as certainly serious attack upon his character is a matter not of private but of public moment. This much of apology we offer for noticing a present controversy, if the preferring and rebutting of criminal charges can be called a controversy. In a paper entitled "True and False Medical Experts," and more directly in subsequent writings, Dr. Grissom unskilfully, and with much of very objectionable matter, makes certain charges against the New York neurologist. Omitting the minor of these charges, the more serious may be stated succinctly as follows:

First. In order to clear McFarland, who shot Richardson, Dr. Hammond stated on the witness-stand "that the insane are very persistent in their revenge. I have known insane men occupied with the idea of killing their keeper for years, and finally do it;" whilst in order to convict Montgomery he stated that "deliberation takes away the idea of an insane act."\*

Second. That to insure the execution of Reynolds, Dr. Hammond declared under oath, "The disease [epileptic mania] is of remarkably short duration. There is not

a case on record where it has lasted fifteen minutes;" whilst in order to convict Montgomery he had said, "when an epileptic has suffered from an attack, the mental disturbance continues, frequently, several days."

Third. That in the Johnston will case he gave testimony which was scientifically false, although necessary for the breaking of the will, and† that it was proven that he was to receive five hundred dollars for his testimony, and a contingent of twenty-five hundred dollars if he succeeded in breaking the will.

Fourth. That in the Montgomery case he one day gave one opinion and the following day an opposite one, having been seen in the mean while by the interested counsel.

Of course a wicked man may make a true accusation, and a man of good repute a false one. Nevertheless, the gravity of a charge in a case like the present is enhanced by a previous character for ability and probity on the part of the accuser. Dr. Grissom is a prominent chemist, of good repute among his associates, and he is a member of the Judicial Council of the American Medical Association. Under the circumstances it seems inconceivable but that he believes to be true what he asserts. To prefer such charges falsely, or even lightly, against a physician of Dr. Hammond's renown, would be professional suicide.

These considerations in no way prove the truth of the accusation, but they do remove the transaction from the arena of mere personal dispute and quarrel, and entitle it to rank as a semi-official citation of the asserted culprit before the profession, by one selected by the profession to judge of its ethical and moral questions. This view of the case is further strengthened by the somewhat defiant offer (in response to Dr. Hammond) of Dr. Grissom to prove his charges before a jury and to deposit suf-

<sup>\*</sup> We must refer to the pamphlets of Dr. Grissom to show how these various assertions were necessary to the escape or conviction of the accused.

<sup>†</sup> That there are no lucid intervals in monomania.

ficient bonds to cover any probable award of damage.

Under these circumstances the case assumes a most serious aspect. There is no medical man in these United States that could afford to allow his reputation to rest for a day in this position.

There is no medical body meeting in this country more reputable than the Association of the Superintendents of \*the American Institution for the Insane. the last meeting of this body a resolution was offered and warmly pressed by three members, condemning the action of Dr. Grissom. It was, however, defeated, we believe by an overwhelming majority. This is, of course, a virtual endorsement of the charges. So that, as the case now stands, the said charges have not only been publicly preferred against Dr. Hammond by a member of the Judicial Council of the American Medical Association, but have also been endorsed by the National Association of Specialists connected with the subject.

The reply to all this on the part of Dr. Hammond is to be found in two pamphlets, which may be analyzed as containing-first, various counter-charges against Dr. Grissom, with a flood of personal abuse; second, the assertion that the Association of Superintendents are endeavoring to destroy him (Dr. Hammond) because he has been an advocate of the non-restraint system of treating insanity; third, the partial denial of some of the charges, but no straightforward, complete denial of them, and no attempt to disprove the detailed statements and documentary evidence offered by Dr. Grissom.\* A simple denial from Dr. Hammond of the accusations against him would have deservedly had great weight with the profession; but his "open letters" are such a mixture of seeming evasion, school-boy

wit, puerile abuse, and disgraceful vulgarity† that we think they must have astonished his warmest friends. They certainly do not meet the needs of his cause at all. The profession will be very slow to believe his accusations against the Superintendents' Association, and it is he, Dr. Hammond, and not Dr. Grissom, who is at the bar of public opinion. If Dr. Hammond would retain any of the respect of the profession, he must make a brief and pointed but detailed denial of the charges, and follow this by citing Dr. Grissom either before the Judicial Council of the American Medical Association or before a jury in a libel suit. The professional tribunal is, to our thinking, the proper one: but if Dr. Hammond desires to recoup himself for the expense and annovance to which, if innocent, he has been unnecessarily subjected, the civil court is open to him. Of one thing he may be certain,—that by his own replies he has done much to turn against himself the current of professional opinion, and that the circumstances of the case imperatively demand decisive action on his part.

A REPLY has been received from Prof. Martin to our editorial upon Johns Hopkins University. It is in type, but has been crowded out of the present number, and will appear in the next issue.

<sup>\*</sup> It is but fair to state that the more serious of the counter-charges are disproven by documentary and other evidence by Dr. Grissom.

<sup>†</sup> To justify this assertion, we quote in full the latter part of the concluding paragraph of the second open letter. Ex uno omnes disce.

<sup>&</sup>quot;A distempered and snarling cur has nobler mental and moral qualities than you; the vibrio that wriggles in decomposing filth is higher in the scale of existence; the foul bird that defecates in its own nest is less odious; the wretch who, actuated by perverted instincts, revels in nastiness and abominations, is not so execrable; the monster who insults the mother who bore him is more entitled to human sympathy. Whether you receive your dues in this world or in the next is, as I have said, a matter of no consequence to me; but if a being as grovelling, hypocritical, fraudulent, and polluted as you could, through any means, escape the punishment to which his crimes entitle him, then I should lose faith in the justice of an omniscient God, and wonder for what purpose hell was instituted. Go, graceless and irreclaimable quack, hardened and infamous blackguard, sane or insane, knave or maniac, and regale your devious fancies by the contemplation of your own depravity."

## CORRESPONDENCE.

#### LONDON LETTER.

THIS month is marked by the opening of the winter medical session at the various schools. It is the rule for the session to open with an introductory address, though in one or two of the larger schools the address has been done away with; it might be interesting to know why. It is just possible that the addresses at the large schools might not be so stupendously superior to those given at the lesser schools as the authorities of the great institutions might desire; but comparisons ever partake of an odious character, and even medical school addresses might not escape entirely. The most remarkable addresses were that of University College and that given at the Middlesex. The address given at University College was by Prof. E. Ray Lankester, the son of the well-known late Coroner for Middlesex, who is Professor of Zoology in the college. He is an Oxford-educated man, and is not a medical man at all. His utterances on the relation of medical teaching to universities are then all the more deserving of our attention and thought. He speaks from an outside stand-point, which makes his remarks all the more incisive from their dispassionate and unselfish character. He pointed out with some feeling how theology at the English universities had succeeded in strangling the medical element, especially at Oxford, where the semblance even of medical teaching has disappeared. A professor of medicine gives no lectures: when the commissioners, inquiring into the funds of our old universities in 1854, resuscitated Linacre's forgotten gift to medicine, a medical man was elected to the chair, so that physiology should be taught. "But," says Prof. Lankester, "such is the perversity of fate in Oxford, he continues to occupy the chair, but does not occupy himself with physiology." It would seem but too clearly that the forces in action at Oxford are but too potent; they are strong enough to eat the earnestness and professional enthusiasm out of such men as the professor of medicine and the Linacre professor of anatomy and physiology; neither of them wanting either in intellectual power or in moral backbone. That upas-tree shade which theology throws over all other teaching at Oxford is too much for all the attempts at life in anything bearing on medicine. The late Henry Thomas Buckle held some very strong opinions about the guiding principles of our two great universities, which have made his writings unpopular, if not unknown to the graduates and undergraduates of these two universities; and he objected particularly to those of Oxford. It would seem that, either by hard fate or by human perversity, Oxford continues to manifest the most rooted objection to any

knowledge acquired by the natural man. Cambridge, with Prof. Humphrey, and still more Michel Foster, is working, and is no longer a mutilated university lopped of one of its most

important faculties.

As to the capacity of these two towns to teach medicine, he contrasted their populations with those of some German university towns, and showed that with smaller popu-lations some small German university towns were doing excellent work. It was the want of willingness, not the want of facilities, that placed the English universities where they were. Oxford has its Radcliffe Infirmary, with no less than 187 beds, and does nothing. Oxford is too far gone, evidently, for the sense of shame to arouse the present staff of the Rad-

cliffe Infirmary into activity or life.

Having presented a clear résumé of what had been done at Oxford with the funds left -and ample funds, too-for the prosecution of medical study, he turned his lens upon London, and lighted up some matters with a ray which showed some queer musty forgotten corners. When certain persons succeeded in founding the University of London, they raised £,153,000, with which they set it going. But there existed in London misappropriated wealth which ought to have been devoted to medical teaching to the extent of half a million of money. When Sir Thomas Gresham died, in the sixteenth century, he left bethe died, in the sixteenth century, he left behind him some most valuable property in the city of London. "He directed that seven professors should be appointed and lodged in his house, and that liberal stipends should be paid them from the proceeds of his estate. The professors included one of astronomy, one of mathematics, and one of medicine. The estate bequeathed for the purposes of this college is now estimated to be worth three million pounds sterling. At the least, one-seventh of this belongs to medicine,-nearly half a million of money. Is this money paid over by the trustees in any way in support of medicine or medical study? I regret to say it is not. By a conspiracy between the Crown and the City Corporations, Gresham's property was in the last century fraudulently diverted from its legitimate objects. A large part of the estate, and old Gresham House, were handed over to the Crown in order to build on the site an excise office. The city authorities received a consideration in the form of certain privileges as to the raising of dues. The most astonishing feature about this transaction is that, in form at least, Gresham's College still exists. trustees feel so safe in their legalized outrage that actually there is in the city of London a lecture-theatre at the back of the premises of the Mercers' Company; and there, in rotation, the Gresham professors, who are nominated by the trustees and are paid at a little more than the nominal rate directed by Sir Thomas Gresham, give formally and unheeded their

annual course of lectures." This is a pretty strong expression of opinion on the part of young Prof. Lankester; but who ever hears of the Gresham lectures in medicine? The present Gresham professor of medicine is little known as such; his reputation is associated with a consumption hospital, and his published Gresham lectures relate to the elevated health resorts of the Southern Hemisphere, and a small brochure on Coughs, often seen on the bookstalls of the great metropolitan railway termini. Such, then, is the present fallen state of medicine in the city of London. Medicine is poor, is ununited, can readily be cuffed with impunity, and has been shamelessly despoiled in the past: what are its pros-

pects in the future? Dr. Arthur W. Edis, at the Middlesex Hospital, delivered an address devoted to the consideration of his own department,—obstetrics. He pointed out how this department had been neglected in the past. "Two circumstances," he said, "have contributed more than any other to depreciate the study of midwifery: one is the imagined facility with which it may be practised, the other is the want of a distinct obstetric board or centre of education." Yet he pointed out forcibly how sudden were many of the emergencies of obstetrics, how little time for thought they offered, and how necessary therefore it was that the subject should be one with which the medical mind was thoroughly familiar. He said, "You are given no time to seek information: you will become embarrassed and incapable of undertaking the principal duty you have to perform. In failing to secure the safety of your patient, need I tell you the painful situation, the unenviable feelings, of the practitioner who, through his ignorance or his neglect, has snapped asunder the dearest tie of society,-who has converted a house of joy and anticipated congratulation, where perhaps a happy result was confidently promised, into a house of mourning, in which a desolate husband and an orphan family have to pay the penalty of his presumption and neglect! He then showed the sins of the Royal College of Surgeons of England, with its imperfect diploma, which, however, permits its member to practise every department of medicine; they licensed men to practise, yet failed in their duty to the public by neglecting to see if they possessed the requisite information to make them safe advisers, in whom the public could place undoubting confidence. He then referred to the education of midwives, and pointed out the dangers to which so large a portion of the wives of the working classes are exposed through the ignorance of self-dubbed midwives, insisting upon the more complete education of such women.

He then proceeded to consider the effects of pregnancy upon the newly married wife, of the rapid and often passionate precipitation of the maiden into motherhood. "Physio-

logical conditions," he said, "pass by an almost invisible series of transitions or degenerations into the domain of pathology, almost justifying the dictum of Mauriceau, that pregnancy is a disease of nine months' duration. In any case the progress of the pregnant woman should be carefully watched: the medical attendant should be expected to visit her from time to time during the whole course of her pregnancy, in order to see that everything is progressing towards a successful delivery, and to remove, if possible, any con-dition which is likely to interfere with this. Many a case of serious uterine disorder would thus be discovered and remedied before the evil had been allowed to go on to a dangerous What would we think of a trainer who allowed a pedestrian, a sculler, a runner, or an athlete, to undertake a feat that would tax his utmost efforts, necessitating stamina, strength, speed, skill, and endurance, without many preceding months or weeks of training and supervision? And yet we allow the wives and mothers intrusted to our care to go on in ignorance of the necessity of strict attention to hygienic and physiological laws in order that they may with safety bring forth their offspring." Of course it may be objected that the whole training of women is such that the young wife would scarcely feel inclined to speak of troubles connected with her first pregnancy, and would instinctively prefer to attribute them to the natural changes produced by impregnation; but, by so doing, a great deal of mischief does go on, as Dr. Edis says. Among these are cases of retroversion of the gravid uterus, which becomes impacted in the pelvis, with all the long array of troubles which follow: if not attended to early, the most serious consequences may follow, and the efforts requisite for replacement be much more energetic than would be the case if the patient were seen and attended to earlier. The dangers of a miscarriage are often greater than young couples imagine, and many such cases are passed over as trivial which are found to have far-reaching consequences. "Many a valuable life has been sacrificed, and many years of suffering and unhappiness produced, in consequence of making light of a miscarriage, either wilfully or ignorantly. Even should the patient recover from the immediate effects of the miscarriage, the severe hemorrhage and suffering, the anxiety, and confinement to the house, call forth inevitably any latent disposition to tubercle or other hereditary disease; and while sorrowing for the life thus prematurely cut short, or vainly regretting the blighted hopes of a fruitful marriage, the knowledge that this depended merely upon a neglected miscarriage will prove no solace to the friends or comfort to the sufferer." Dr. Edis hinted that in the case of a young wife who died recently after marriage, and whose death excited the sympathies of nations, the death attributed to "nervous gastric fever"

was really due to "hemorrhage and septic mischief, the result of an overlooked miscarriage." He then alluded to the possible treatment of extra-uterine fœtation if the symptoms only attracted a sufficient attention to lead to a correct diagnosis in time: to the detection of pelvic deformity calling for the induction of premature labor, by which most serious danger may be averted, which would ensue if the woman were allowed to go unheeded and unsuccored to her full time. How often he said, were obstetricians called to a case of uræmic convulsions in the gravest stages. where a whole train of symptoms—headaches, drowsiness, loss of memory, even cedema of the feet and hands, and other well-marked precursory symptoms of albuminuria-had existed for weeks past, but no practitioner had At other times the patient is been called in! permitted to reach her hour of trial after months or weeks of ill health, and has to meet the ordeal as best she may, when by careful attention to various matters she would have been fairly well when the time of the ordeal came to her. Dr. Edis eloquently described the sudden accidents which may convert a house of gladness into one of mourning where a birth is expected. He then referred to the imperfect education of the medical student in practical midwifery, and the loss of life to mothers and children resulting therefrom. He related a case of a lady who had studied at Cambridge for three years and distinguished herself at the University examinations and was appointed principal to a training college. She was confined at 3.20 A.M., but it was not till 5 A.M., when she was all but moribund from profuse and continuous flooding, that any suggestion was made as to removing the placenta. It was removed in order that "the woman should not die with it in her." might Dr. Farre observe, in the Registrar-General's report, "Such fearful cases should be judged by the Medical Council.

The opening of the medical schools has evoked a very well written leader in *The Standard*, a conservative paper of repute, which interests itself in the profession. starts by stating that the student of to-day is the practitioner in whose hands the lives of the next generation will be placed, and therefore it is satisfactory to know that the class of man, or youth rather, who is coming forward as the medical student is of better quality than of yore. It is rather hard on the medical students of the past to say that "they seemed to imagine that a course of reckless dissipation was a proper part of their training. Certainly a medical student of the old school did make some experiments upon himself as to the effects of alcohol, and the risks of certain contagious affections, with probably such good results that they helped him to become that type of respectability,—the family doctor," as The Standard puts it. It assuredly is a pity that certain knowledge of humanity and human beings can only be bought with a price. A medical man is brought into contact with humanity in some of its more curious aspects, and a certain personal experience is a very useful thing under these circumstances: but then the only means by which such knowledge can be acquired is such as to be very shocking to—spinster aunts, for instance. But a student nowadays is kept pretty well at work, so that he cannot devote the first winters of his student course to the examination of the darker side of humanity and then pull up and cram his third winter and make a good appearance at the examination-table. The old plan of not examining a man till the end of his third session did a great deal of mischief. Sharp men could dissipate for two winters and pass their examinations when the time came; but for others not equally gifted the examination-day came and they were found wanting, and very often their prospects in life were blighted thereby. The regular course now, including class examinations, keeps a student at work all along his career, and especially during his first session, when the temptations of his new life are strongest. The chronic student, who never succeeded in passing, but who kept on with some vague hope of one day being enabled to study and pass, is a feature of the past that can well be spared. On the other hand, *The Standard* very justly remarks "that the system of medical education which is most in favor in the present day is very apt to lead the student to the conclusion that the object of his study is to pass an examination, more or less difficult. as the case may be; and not, as it should do, to teach him that he is being prepared for a life-long practice of a difficult profession, not merely to pass a crotchety examiner by the aid of a clever coach." This is rather severe on the present form of medical teaching; but, as the late Henry Thomas Buckle wrote, "one has yet to learn that the disagreeableness of a fact can be accepted as a proof of its falseness." Further, *The Standard* holds that the tendency of the merely hospital-taught man, when brought into contact with private patients, is to treat them as hospital patients are summarily treated, and consequently to "the inevitable result of having his services declined in the future. The Britisher has a decided objection to being the subject of "learning experience," as an old pauper lady once remarked to the writer; and when a young man with several conspicuous gaps in his culture, social and other, commences to learn his experience at the expense of the patient (in several directions), the Anglo-Saxon instinct leads pretty surely to the conviction that a more matured experience is perhaps the most judicious thing to invest in. The old-fashioned plan of apprenticeship and familiarity with the sickroom as well as with the hospital ward is advocated by this lay writer, and it is to be

hoped the profession will profit by his words. The leader concludes with some severe strictures upon female medical students, to whom evidently the writer is very decidedly opposed. He says that "any woman who obtains a medical diploma must undergo a great deal that is unpleasant in tuition;" nay, more, "the idea of a woman engaged in the necessary work of the dissecting-room, or taking her part in certain common operations with men, is enough to cause a shudder in any man who has a wife or sister." This is very terrible. but somehow medical women do not seem to be demoralized by their professional education. The Anglo-Saxon view that the female mind is built up in such a flimsy manner and of such rickety material that a small acquaintance with certain knowledge means collapse and utter moral ruin, is now somewhat antiquated and is not likely to survive much longer. There is such a thing as a clean knowledge and an unclean ignorance; and this holds good especially of women.

The growing use of the microscope as a means of investigating the nature of the fluid in ovarian cysts, and so of settling the question of operation or no operation, is now attracting much attention. A paper by Dr. Thomas Keith of Edinburgh, whose skill and success are only second to Mr. Spencer Wells's on the subject of ovariotomy, was read at a suburban medical meeting lately. On returning home with Dr. Matthews Duncan and Professor Lister, the conversation ran on to the subject of the diagnosis to be formed from microscopical investigation of the fluid to be obtained by tapping. Both these great authorities were in agreement that when there is a certain amount of peritoneal fluid as well as an ovarian cyst, there is a strong probability of the fluid containing cancer cells, and that when such cancer cells were discovered it was most undesirable to perform ovariotomy. growth of villous cancer over the peritoneum generally is much increased by the removal of the cyst and the irritation set up by the operation.

The information has just reached me that I am now connected with the profession in the United States, having been elected an Associate Fellow of the College of Physicians of Philadelphia. Such an honor is very gratifying, and association with the medical profession in the United States of America is ever agreeable to the writer, for the advance of medicine in the direction of therapeutics lies now mainly in American hands,—or perhaps, rather, heads.

J. MILNER FOTHERGILL.

ADULTERATION OF SANTONIN.—Santonin is said to be adulterated with boric acid. The test is: ignite the specimen, dissolve the residue in boiling water, allow to crystallize, when boric acid separates, and is recognizable in the usual manner.

### PROCEEDINGS OF SOCIETIES.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

A T a conversational meeting held October 9, 1878, Dr. Henry H. Smith, President, in the chair, forty-eight members were present. The following new members were introduced: Drs. Russell H. Johnson, T. H. Bradford, T. H. Seyfert, Charles Wirgman, and R. G. Curtin.

The paper of the evening was read by Dr. Wm. Pepper, on "Organic and Functional Anæmia, and Milk-Transfusion as a Remedy" (see page 54), containing the history of two cases of profound anæmia, in which fresh cow's milk had been injected into the veins

with favorable results.

The chairman inquired as to the character of the respiration, as it might be anticipated that caseous deposits may form infarction in the lungs. Dr. Thomas, of New York, apparently considers milk to be as harmless as chyle, but, since it has not undergone digestion, this could scarcely be the case.

Dr. Pepper, in reply to a question from the chair, declared that it was difficult to state whether the benefit following the milk-injection was due to the actual amount of nourishment contained in the quantity transfused, or to the stimulating effect upon the heart and vessels from their mechanical distention by the warm fluid, just as salt water has been injected in the treatment of cholera. The constitutional effects produced are certainly out of all proportion to the small amount of milk injected. In the second case mentioned in the paper there was more nourishment lost in the albuminuria produced than was contained in the milk employed.

In a case of profound, acute anæmia following hemorrhage, there are no such great disturbing elements as are present in cases of long-standing disease. We would have in the former condition, first, the nutritious value of the injection; second, the influence upon the heart itself; and, third, the stimulating effect upon the whole system. In such cases, intravenous injection of milk or of blood will enable a patient to tide over the period of lowest depression until reaction occurs. Many of the most brilliant cases have been of this character, and, while it is undoubted that the operation has saved life, it is probable that some of the subsequent symptoms are to be regarded as due to natural reaction and not directly to the transfusion. In these cases also, it would seem that there is less danger of the occurrence of grave symptoms after the operation than in cases of long-standing disease, especially where there is implication of the heart or lungs.

In reply to Dr. O'Hara, it was admitted that for a complete study of these cases, not

only the entire daily excretion of urine and its constituents should be recorded, but the patient should be kept in a Pettenkofer chamber, and the total amount of carbonic acid, sweat, and other excretions be accurately determined before and after the operation.

Dr. Chas. T. Hunter said that in the operations mentioned in the paper, and in others that he had performed in private practice, he had made a preliminary incision obliquely across the vein about half an inch in length, dissected the vessel free from the surrounding cellular tissue, and raised it on a grooved director, before introducing the canula, which then slipped in without any difficulty what-There is not the slightest need of transfixing the vein. As the canula penetrates the vessel it fills its lumen completely, so that no room is left at its side for the admission of air. There is an advantage in using the sharppointed canula, as it enters the vein directly, while without it a perceptible interval must elapse between the opening of the vein and the introduction of the canula.

The isolation of the vein is required from the fact that it is almost impossible to thrust the instrument through the skin directly into the vessel. In one operation performed for the transfusion of blood, he had made seven punctures before entering the vessel, and had transfixed the vein several times in attempting to perform it without the incision in the skin. This he considered unobjectionable and harmless; as the wound generally heals by first intention, it does not add to the pain or the risk of the operation.

The diameter of the canula is a little less than two millimetres, being rather smaller than either the median cephalic or the median basilic vein, the latter of which he generally prefers to operate upon when he can have a choice.

The material of which the canula is made is steel, nickel-plated. They are made by Mr. Gemrig, who, at his request, made one with a point quite sharp, which he had used with complete satisfaction. The rubber tubing is about four millimetres in diameter and about sixty-one metres (twenty-four inches) long. A funnel holding about four ounces is attached to the opposite extremity of the tube. is first received in a can surrounded with water at a temperature of 100° Fahr. The fresh milk is then strained through metallic gauze into the funnel, and is made to flow through the tube by elevating the funnel. The last canula which he had made has a stop-cock, so as to control the flow of milk. When the stop is turned off, the canula remains filled with milk, retained by capillary attraction: it does not run out even when the tube is held vertically.

Transfusion of milk was performed with success by Dr. Thomas, of New York, with striking results, as reported in his article in the *New York Medical Journal* for May, 1878.

On the 31st of last May, Dr. W. E. Bullard of New York, had occasion to perform transfusion in a case of gastric ulcer prostrated by repeated hemorrhages both by the mouth and rectum. Dr. Bullard decided to inject milk into the circulation, and selected the cephalic vein. He had some difficulty in introducing the canula, but succeeded in throwing in seven ounces of cow's milk. The patient recovered, but the operation was followed by angioleucitis, extending up and down the arm, and a number of abscesses resulted. This inflammation the operator attributed to the escape of milk into the cellular tissue around the vein. This need not happen if the vein is isolated and directly penetrated by the sharp-pointed canula. Performed in this way, it becomes one of the simplest operations in surgery.

In a noted case of typhoid fever, that attracted considerable attention this summer. where convalescence was prevented by repeated hemorrhages from the bowels, the transfusion of milk was performed with marked success. On the fifty-sixth day of the illness the patient was lying in an unconscious condition. -pulse imperceptible, skin cool and clammy, respiration sighing. Several physicians who were in attendance considered the patient moribund. At the consultation, Dr. Elwood Wilson had suggested transfusion of milk, and a goat had been obtained in preparation for the emergency. With the patient in the condition described, some difficulty was experienced in finding a vein, as the vessels were nearly empty, but he made no resistance through the course of the operation, nor gave any signs of pain. Five and a half ounces of the fresh goat's milk were slowly injected into the right median basilic vein. Decided improvement was observed in his condition. In this case none of the physiological manifestations previously referred to this evening were present. No bad symptoms followed, but the result was so favorable that the next morning six ounces more of the milk were thrown into the corresponding vein in the left arm. The next day the vessels were filled with blood, his pulse was stronger, he took nourishment well, and had fewer passages. He was fully conscious, and recognized his attendants, and wondered why there were so many physicians around him. In three or four days, during which small hem-orrhages occurred from the bowels, he was again reported dying, with a temperature of Transfusion was again performed, and 106°. ten ounces injected, but he died immediately after the operation.

The incisions in the early operations healed by first intention, and on the fourth day the blood was flowing through the vein, the wound having entirely healed. It is not necessary to apply ligatures to the vein above and below the puncture, as has been practised by some operators, for, as is seen in this case, the

wound closes directly and leaves the vessel

pervious.

Dr. J. C. Wilson, referring to the suggestive questions of Dr. O'Hara, stated that he had recently seen the statement in a paper by Lichtheim, on "'Paroxysmal Hæmaturia," in Volkmann's series, to the effect that the urine contained large quantities of hæmoglobin after transfusion of lamb's blood or that of man. Ponfick, by a series of observations, had arrived at the conclusion that the red globules of the transfused blood were rapidly destroyed after injection into the veins, and that their coloring-matter appears in the urine. It appeared to the speaker that this rapid destruction of blood-cells might afford an explanation of some of the physiological disturbances that are said to follow the operation. Milk, being free from this serious objection, would seem to possess in this respect a further advantage over blood for purposes of transfusion.

Dr. Fredk. P. Henry said that the division of anæmias into functional and organic, although perhaps the best classification that with our present knowledge can be made of these affections, is yet by no means accurate; for if, as some do, we regard the blood as a tissue, every anæmia, involving, as it must, a change in the proportions of the blood-constituents, is organic, or, what is a preferable term, structural. On the other hand, there are many profound anæmias which, in that they are not recovered from, fully deserve the name of pernicious or malignant, in whose causation the blood-making organs take no direct part. I may refer, for example, to the anæmia that is so often the first, and perhaps for a long time the only, manifest symptom in the form of Bright's disease whose lesion is the contracted kidney,-the kidney of interstitial nephritis. Again, if there be such a thing as functional anæmia, it is that form that is caused by insufficient food: but what blood-making organ is functioning imperfectly under such circumstances? I may be told that it is the mesenteric glands. To which I reply that if this be so, these organs are not the only ones whose function is impaired under such circumstance: what is to be said of the muscular system, the heart, and the brain? In fact, every tissue, organ, system, and sense, with the exception perhaps of the sense of hunger, is then impaired as to its function. I would also inquire by what right we deny to the blood-making organs that compensatory power that we accord to every other organ of the body? We are quite as fully warranted in assuming that, under adverse circumstances of nutrition, the functional capacity of the hæmopoietic organs is increased as that it is diminished; their stores of cells may then be poured out in extra quantity to supplement the deficiency in the food. And here let me throw out the suggestion that an increased, though perverted, activity of these organs may be concerned in the production of the fever that attends a prolonged abstinence from food.

The question of treatment is quite as ob-It would seem at the first glance that, where the blood is deficient in a proximate principle, the indication is to restore the substance in the most readily assimilable form. Brilliant results have doubtless been at times in this manner obtained. Life has been saved in cases of post-partum hemorrhage by timely recourse to transfusion of blood, and health restored in cases of chlorosis and anæmia by the exhibition of ferruginous tonics; but we all know of cases, and doubtless ignore many more, where, the red cells being deficient, neither iron nor the most nutritious food, nor transfusion of any substance, nor, in fact, anything but the one drug indicated, will have the effect of fully restoring them. I may refer for example to the effect of small doses of mercury in the anæmia of syphilis, as fully demonstrated by Keyes, of New York. Mercury does not exist in the blood, nevertheless it will enrich it. Iodide of potassium, arsenic, and the preparations of cinchona will often have the same effect, and none of these substances exist in the blood, unless we make an exception in the case of cinchona, and believe, with Bence Jones, that a substance simlar to quinoidine is a normal constituent of the vital fluid. Even if this be so, however, there is no proof that the malarial poison destroys it, and that the administration of cinchona and its alkaloids in malarial disease is simply restoring what has been destroyed.

As regards the transfusion of milk, this substance is administered either with a view to its action as a nutriment, or for its mechanical effect, or with both these objects combined. We are certain as to the mechanical action only. It would be an interesting thing to determine what proportion the nutriment contained in the blood lost by the incision, bears to that contained in an ounce of milk.

Dr. Hunter, before concluding the discussion, would state that he did not think it safe to wash the apparatus with carbolic acid before using it, or if this is done it should be rinsed in a warm alkaline solution afterwards, and should be kept in a hot alkaline solution till everything is ready for the operation. It is important that the milk should remain alka-In the experiments reported by Dr. line. Thomas, out of seven dogs operated upon without this precaution, all died. The experiment being repeated upon other dogs with alkaline milk was successful. The speaker also did not consider it safe to use a cotton or linen gauze strainer, as some of the small fibres may be washed into the circulation: he had a metallic strainer made, which fits on the top of the reservoir or funnel.

Dr. John Guitéras said that the nervous phenomena following the transfusion of blood or of milk did not seem to him to resemble at all those produced by rapid de-

struction of hæmoglobin. In the latter class of cases, hæmatogenous jaundice, with its peculiar train of nervous symptoms, occurs; phenomena which had not been observed after transfusion. The symptoms in the latter case are not such as are found in cases of hæmatogenous jaundice due to destruction of the hæmoglobin, whether in the course of some diseases or produced experimentally, viz., by the injection of biliary acids, chloroform etc.

The well-known symptoms following transfusion are chiefly due to mechanical causes, from obstruction in the circulatory apparatus. The dyspnœa is caused by the refusal of the capillaries to transmit the changed blood through the pulmonary tissue. This spastic contraction occurs everywhere as the result of this altered blood, and may even lead to rupture, extravasation, and infarction. The cerebral congestion and bursting pain, the difficulty in breathing, the chill, the profuse sweating, and the albuminuria may thus be accounted for.

(To be continued.)

## REVIEWS AND BOOK NOTICES.

THE PRINCIPLES AND PRACTICE OF SURGERY, BEING A TREATISE ON SURGICAL DISEASES AND INJURIES. By D. HAYES AGNEW, M.D., LL.D., Professor of Surgery in the Medical Department of the University of Pennsylvania. Vol. I. Philadelphia, J. B. Lippincott & Co., 1878. Royal 8vo, pp. x, 1062.

The publication of the first volume of this long-expected work in advance of the succeeding portion, and the fact that there is much inquiry as to the scope of the completed part, lead us to occupy the space which has been allotted for the purposes of review with a bibliographical notice rather synoptical than critical in its character. The faults and deficiencies of the book—and no book is without them—will doubtless be pointed out by careful reviewers; but at present it may be equally interesting to note a few of its many merits, and to call attention to the opinions of its distinguished author, now for the first time published, upon some of the disputed points of surgical theories and practice.

The introductory chapter, on Surgical Diagnosis, is a succinct statement of the groundwork of fact and the methods of reasoning which underlie all endeavors on the part of the surgeon to arrive at a correct appreciation of the nature of the cases committed to his

charge.

In considering the subject of inflammation, to which, with its results, Chapter I. is devoted, the author gives evidence of careful and original research into its nature and causes. He has repeated some of the experiments of M. Bernard, and has made others which have supplied material for several most accurate and life-like illustrations,—noticeably, those on page 47, contrasting the uninflamed and the inflamed mesentery of the frog. Several pages are devoted to a clear, and interesting history of the causes and nature of inflammation. This is the first instance of a principle which will be found to pervade the entire work, that of giving not only the latest and most accepted theory of treatment or pathology, but also those which have been prevalent in time past but which have succumbed to modern research and progress.

In considering the subject of amputation after mortification, he formulates with great clearness and precision the circumstances under which the operation should or should not be performed. In those cases in regard to the treatment of which there is the greatest difference of opinion, viz., those of traumatic mortification where the disease is well established and rapidly progressing, without any line of limitation, he insists upon the necessity of waiting for the line of demarcation, and says that he is so thoroughly convinced of the correctness of this rule that in civil practice at least he can make no modification of it. Mr. Holmes, Mr. Erichsen, and the majority of English surgeons are, we believe, inclined to the opposite view, the latter especially urging immediate operation.

Chapter II. is devoted to the consideration of wounds, and opens with an account of the closure of vessels by nature, most of which is derived from a study of this process in various experiments on dogs performed under the supervision of the author. These have shown various interesting facts in relation to the organization of the clot and its unification with the walls of the vessel. Going on to the consideration of the arrest of hemorrhage, the various chemical hemostatics are mentioned, but as a class with little favor; torsion is unequivocally rejected, as possessing no advantage over ligation either in facility of practice or in subsequent healing, and as probably being more unsafe. Acupressure, arterioversion, and other methods are carefully described; but the author's opinion of the relative merits of all these plans is summed up in the following sentence: "The direct or immediate application of a thread to a wounded vessel is, on the whole, the most satisfactory mode of arresting hemorrhage." He never uses any other than the catgut ligature, and has the utmost confidence in its stability and efficiency if the following precautions are observed,—not to use the thread until it has been macerated for two or three months in carbolic acid and oil, or for a shorter time in the same mixture with the addition of chromic acid, to draw it between the thumb and finger in order to remove the adherent oil, to adjust the knot with care,

and to leave the ends about one-quarter of an inch in length. This careful mention of these apparently trivial but, as every practical surgeon will admit, highly important matters is an illustration, which might be multiplied indefinitely, of one of the most valuable, if not the most valuable, of the characteristics of this work. Nothing which in the immense experience of the author has been found directly or indirectly to affect the success of an operation or the conduct of a case has been forgotten or overlooked; and the book would be worthy a careful perusal for the sake of the many such little practical hints and suggestions with which it abounds. if for no other reason.

Detailed directions are given for the aftertreatment of wounds, the application of bandages, compresses, adhesive plaster, etc., together with instructions for the employment of the antiseptic method, which the author says he believes, after a trial of one year, to pos-

sess advantages over all others.

After describing the different varieties of wounds, the subject of healing is considered, and here, as in the case of the process of closure of vessels, the illustrations are especially deserving of commendation, as conveying definite pathological ideas and differing from the stereotyped and incomprehensible diagrams which ordinarily befog this subject. In regard to the various modes of healing, the process of *immediate union* is rejected as impossible, as it is now, we believe, by the majority of surgical writers.

Chapter III. is taken up with Injuries of the Head. The rules for the treatment of simple and compound fractures of the skull are given with much precision and directness, the author evidently having decided and well-grounded opinions on this subject. In depressed and comminuted fractures, where symptoms of compression are absent, he refrains entirely from operative interference. He differs in this from Professor Gross, who recommends ele-

vation of the fragments.

In the section on wounds of the face he describes his own operation for the cure of salivary fistula, the essential point of which is the introduction, from the inside of the mouth, of a thread between the external surface of the cheek and the duct, some distance above the opening of the latter, so as to cut it away from its attachments to the cheek, the ends being brought out of the mouth and serving to convey the salivary secretion in that direction.

Chapter IV. treats of Injuries of the Chest and Abdomen. An excellent instrument devised by the author for making compression on the intercostal artery is figured and described. The operation of thoracentesis is described, and its *early* performance recommended where the proper indications exist, the author believing that there is usually unnecessary and harmful delay in such cases. In his

directions for the performance of this operation he advises the selection of the sixth intercostal space on the right side, and of the seventh on the left, thus differing from Erichsen, who chooses the "fifth intercostal space on the line of insertion of the serratus magnus," and from Bowditch, who directs that the puncture be made "on a line with the inferior angle of the scapula, and between the eighth and ninth or ninth and tenth ribs."

Chapter V., which treats of Wounds of the Extremities, is devoted almost entirely to injuries of the hand; though the surgical anatomy of what the author calls the "vital portions of the upper extremity" is carefully

considered.

Chapter VI., on Diseases of the Abdomen, includes—rather strangely, perhaps—a section on ascites, which is, we believe, not usually considered as coming within the limits of a text-book on surgery, although the careful directions which are given for the performance of paracentesis abdominis might well excuse its presence. The difficult subject of intestinal obstruction receives careful attention, and the pages devoted to the diagnosis of the various and complicated causes of this serious condition are among the clearest and most instructive in the volume.

The early performance of colotomy is recommended in cases where the rectum or transverse or descending colon is occupied by carcinoma, and the operation of Bryant by an oblique incision is recommended, as preferable to those of Callisen and Amussat, in which the incision is vertical or transverse. Dr. William Ashmead, of this city, is given credit for the first performance of colotomy in this country, he having opened the left colon in March, 1838.

The rectal chemise of the author, for the arrest of hemorrhage from the hemorrhoidal vessels, is figured and described. It is a modification of the *canule à chemise* used in cases of hemorrhage after lithotomy, and is prepared

in much the same manner.

The section on Hernia is, as might have been expected by those who have been familiar with the teachings and practice of the author during past years, one of the most valuable in the book. It affords, possibly, with the exception of that on Fractures, the best illustration of that careful attention to detail which has already been spoken of, and that combination of conservatism with boldness which, we may be permitted to say, has always characterized the professional work of Professor Agnew, and which is noticeable in the teachings of the present volume. We may call particular attention to the excellent diagnostic tables, to the clearness with which the anatomical points are elaborated, and to the directions for reduction by taxis and for the application of the truss.

In the description of the various methods for the radical cure of hernia, we notice that

no mention is made of the plan of Dr. George Heaton, of Massachusetts, which he calls "the method of tendinous irritation," and which he claims to have practised for years, and in many hundreds of cases, with convincing success. Dr. Agnew rejects the other operations which he describes,-Wutzer's, Wood's, Dowell's, his own, and others, -- as unsatisfactory, if not unjustifiable.

We know that a large percentage, if not all, of these operations performed in this city by Dowell's method have been decided failures.
Chapter VII. treats of Diseases and In-

juries of the Blood-Vessels.

The treatment of aneurism by the many proposed methods is considered, and the advantages of each are carefully weighed. The most minute directions are given for the employment of compression, a plan with which he has had large and successful experience. He believes that, while it is not possible at present to establish an entirely fair comparison between all of these different methods, enough is known to narrow the treatment down to the three plans of rest, ligation, and compression, the latter, in some of its forms, being first and fairly tested in every case.

Aneurisms of the special vessels are next

considered.

The author refuses to believe that the uniform failure which has followed the operation of ligation of the abdominal aorta for iliac aneurism constitutes a sufficient argument for a dogmatic condemnation of this operation.

He omits to mention the operation of Watson, which was performed in Edinburgh in 1869 and was editorially mentioned in the British Medical Journal of August 21 of that year. This case, possibly for some good reason, has also been omitted by Erichsen, Bryant, Gant, and Fergusson, in their respective

Chapter VIII. treats of the Ligation of Arteries, includes several valuable tables, and, from the clearness of its surgical anatomy and the conciseness and practical value of its directions for finding the special vessels, is worthy of separate reprint, for the use and guidance of students and practitioners. Many of the illustrations here are new, and some are excellent.

Chapter IX. is a short description of various surgical dressings, including the principal roller-bandages and Mayor's handkerchiefs. The cuts illustrating this chapter are below the general standard of the book.

Chapter X., which treats of Injuries and Diseases of the Osseous System, is worthy of separate review as a treatise in itself. subject is one with which the author has had unusual opportunities of becoming familiar, and his writings are the expression of the result of an almost unequalled experience. After a classification of fractures and a description of their general symptoms, the subject of the repair of fractures is taken up,

and is treated in a manner which shows an intimate acquaintance with the pathological processes involved, derived from original experiments and from clinical observation. disagrees with Mr. Paget, who denies the existence of the provisional or ensheathing callus except in the case of the ribs or clavicle, and believes it to be always present to

some extent.

Ununited fracture is elaborately discussed. A dozen or more plans of treatment are described. A table detailing 685 cases, with the seat of fracture, operation, result, and other particulars, is given in extenso, and is followed by synoptical tables of the results of different methods in special bones, with the deductions to be drawn in each case. These will not bear condensation; but the treatment of the whole subject is more thorough than in any other treatise on surgery with which we are familiar, and the opinions advanced are, for that reason, entitled to be regarded with the greatest consideration. Another valuable table is given comprising the form and results of treatment in 6485 fractures treated at the Pennsylvania Hospital.

Space will not admit even the briefest mention of the many valuable and practical suggestions contained in the portion devoted to the diagnosis and treatment of special frac-

tures.

In fractures of the surgical neck of the humerus he uses an internal angular splint in conjunction with a cap for the shoulder and outer arm, and, contrary to the teaching of many surgeons, discards as unnecessary the axillary wedge-shaped pad recommended by Sir Astley Cooper and used by most English

surgeons at the present day.

In fractures at the lower end of the humerus he begins passive motion as early as possible, and at the end of four weeks casts aside all dressings and puts the limb in a sling. Erichsen does not advise passive motion in these cases until the expiration of a month or five weeks, nor Holmes until the end of three weeks. Although it is not expressly so stated in this book, we know that it is Dr. Agnew's custom to begin much earlier than this, even at the end of a week or ten days, if the swelling and inflammation have begun to subside. In all fractures of the humerus he recommends the application of a roller from the fingers up to the shoulder, disagreeing with Hamilton, who says it is wholly unnecessary, often a source of annoyance, and in most cases injurious.

In the treatment of fractures of the neck of the femur he differs from Sir Astley Cooper, Erichsen, and others, who recommend placing the limb on a double inclined plane, and from Holmes, who advises the use of the long splint, in adopting the rule of treating every such case as though it were situated in the shaft of the bone, namely, by placing the patient on the back and applying extension by adhesive strips with the limb in the straight position. This is the plan advocated by Hamilton, who, however, uses in addition the long side-splint, which he says is necessary to prevent eversion, and which is not employed by Dr. Agnew, as interfering with extension; he uses short sand-bags as a substitute.

The author's testimony in regard to the results of fractures of the shaft of the femur coincides with that of most other surgeons of equal experience and frankness. Save in the case of children, he has never succeeded in curing a case without appreciable shorten-

ing.

All fractures of the shaft of the femur, except those at the upper third, he treats by the plan of extension by adhesive strips with a weight and pulley, which is commonly known in this country as Dr. Gurdon Buck's dressing, although, in this work, Dr. Joseph Swift, of Easton, Pennsylvania, is accredited with the first use of adhesive plaster as a means of extension in fractures. The directions for the application of this dressing are so minute, and at the same time so clear and definite, that by following them with care any intelligent reader would be able to apply the dressing perfectly.

In fractures of the patella he recommends a dressing of adhesive plaster attached to a posterior splint devised by himself. Nearly all the accepted methods of treatment of this injury are described, but no mention is made of the application of the principle of extension by adhesive strips and a weight and pulley to this fracture. We have treated two cases in this way with excellent results, and the plan

seems worthy of further trial.

The concluding portion of this chapter is devoted to a consideration of caries, necrosis,

osteomalacia, and rickets.

As a whole, Professor Agnew's work is one which may well claim a first rank among surgical treatises. Exception may be taken to the increased bulk which has been given it by the elaborate tables which it contains and by the space which has been devoted to the history of disease and treatment; but, while admitting that there is a golden mean between too little and too much teaching, we believe that the danger is usually rather in the direction of deficiency than of excess. The outline which we have given of his views on debatable subjects can convey but an imperfect idea of the great practical value of the book, which, as an embodiment of careful study and long experience on the part of an eminent surgeon, should be in the possession of all who have occasion to treat surgical diseases and injuries.

Those who are lazy or uninformed will need to have it on account of the ease and certainty with which its many practical suggestions and precepts may be appealed to in emergencies, and better-qualified and worthier practitioners will find in its pages much material aid and encouragement, which, so far as we know, they could not elsewhere obtain.

### MISCELLANY.

A SITE has been secured for erecting a crematorium near London by the Cremation Society of Great Britain; and Mr. Eassie, C.E., has been instructed to erect upon it a pyre of the kind designed by Gorini and now in use at Milan.

DR. NICOLSON reports (Southern Clinic, October, 1878) a case of tetanus treated unsuccessfully by calabar bean, chloral, and

bromide of potassium.

DR. H. D. SCHMIDT, of New Orleans, records (N. O. Medical and Surgical Journal, October, 1878) cases of cerebral disease apparently at discord with accepted views of localization.

### OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY FROM OCTOBER 20 TO NOVEM-BER 2, 1878.

BAILY, J. C., MAJOR AND SURGEON.—Granted leave of absence for one month, and permission to leave the Division. S. O. 159, Division of the Pacific and Department of California, October 15, 1878.

Janeway, J. H., Major and Surgeon.—Relieved from duty in Department of the South, and to report to the Commanding General, Department of the East, for assignment. S. O. 235, A. G. O., October 30, 1878.

BARTHOLF, J. H., CAPTAIN AND ASSISTANT-SURGEON.—Relieved from duty in Department of the Columbia, and to report in person to the Commanding General, Department of California, for assignment. S. O. 235, c. s., A. G. O.

LORING, L. Y., CAPTAIN AND ASSISTANT-SURGEON.—Relieved from duty at Jefferson Barracks, Mo., and to report in person to Commanding General, Department of the Missouri, for assignment, to take effect November 25, 1878. S. O. 235, c. s., A. G. O.

FITZGERALD, J. A., CAPTAIN AND ASSISTANT-SURGEON.—Granted leave of absence for six months. S. O. 236, A. G. O., October 31, 1878.

Corson, J. K., Captain and Assistant-Surgeon.—Relieved from temporary duty at Fort Whipple, A. T., and assigned to duty as Post-Surgeon at Fort Yuma, Cal. S. O. 119, Department of Arizona, October 10, 1878.

AINSWORTH, F. C., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—Assigned to duty as Post-Surgeon at Fort Whipple, A. T. S. O. 119, c. s., Department of Arizona.

Havard, V., First-Lieutenant and Assistant-Surgeon.

—Assigned to duty at Chattanooga, Tenn. S. O. 66,
Department of the South, October 22, 1878.

DE LOFFRE, A. A., FIRST-LIBUTENANT AND ASSISTANT-SUR-GEON.—Relieved from duty in Department of the Missouri, to proceed to New York City, and on arrival report by letter to the Surgeon-General. S. O. 235, c. s., A. G. O.

WILCOX, T. E., FIRST-LIEUTENANT AND ASSISTANT-SUR-GEON.—Relieved from duty in Department of the Missouri, to proceed to New York City, and, on arrival, report by letter to the Surgeon-General. S. O. 235, c. s., A. G. O.

Newlands, Wm. L., First-Lieutenant and Assistant-Surgeon.—His resignation accepted by the President, to take effect October 25, 1878. S. O. 234, A. G. O., October 28, 1878.

# PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, NOVEMBER 23, 1878.

### ORIGINAL LECTURES.

I.ECTURES ON A CASE OF FACIAL MONOPLEGIA, ILLUSTRATING THE LOCALIZATION OF CEREBRAL FUNCTIONS AND LESIONS.

Delivered at the Philadelphia Hospital BY DR. JOHN GUITÉRAS,

One of the Physicians to the Hospital, and Lecturer on Symptomatology in the University of Pennsylvania.

(Continued from page 53.)

### LECTURE III.

ENTLEMEN,-You will seldom find a lesion so well circumscribed to one portion of the motor area. This, of course, enhances the interest of our case. Especially is this true of lesions of the facial centre. I believe there is no case of the kind on record with a lesion so perfectly bound by the limits of this area. Facial monoplegias of central origin are seldom met with, and, as far as I know, have always been, as in the present case, left-sided. -the lesion being on the right side. Whether upon the left side this region has been, as it were, monopolized in man by the speech (projecting) centre is only a question of surmise. Certain it is that, as far as I know, the centre for the right facial region has never been demonstrated or distinctly localized in man.

When we come to study the other lesions of this brain, we have to lament some carelessness in the observation of the symptoms. The character of the cerebellar lesion proves it to be nearly of the same date as the facial one. Did our patient present any symptoms indicative of the cerebellar lesion? It is possible that I gave too much weight to the cardiac cachexia as an explanation of the muscular weakness. Let me tell you at once that the symptoms of cerebellar lesion are as uncertain as our knowledge of the physiology of this organ. Hemiplegia, vomiting, occipital (sometimes frontal) cephalalgia, disorders of vision, and changes in the optic nerves, may be present, but in other cases you may find only a slight deficiency of the muscular power such as presented by our patient; and this, I repeat, might have been due to the advanced cardiac cachexia. Yet I re-call that our patient had some vacillation in his gait, and a tendency to come down on his heels when he walked, both symptoms rather characteristic of cerebellar disease. This exhuming of symptoms, as I may call it, is not very satisfactory; yet it would impair the record of the case not to mention them,—the more so, since I have been confirmed in my recollections by the gentlemen who studied the case with me.

Let us turn now to the most recent lesion,—that situated in the posterior part of the cerebral hemisphere. I call it recent because it presented all the appearances of a recent infarctus,—viz., those of blood-stasis. This was the only lesion found post mortem which could have given rise to the symptoms present in the last days of our patient's life.

We had, of course, grounds to believe that another embolus had occluded one of the cerebral arteries. But beware, gentlemen, how you attempt to localize a lesion at this early stage, especially when the symptoms are not well defined, or show a tendency to become graver, or to involve,

step by step, different regions.

Two things were probable in our case. Either the blood was clotting behind the embolus, and other arteries of the motor area were being occluded by thrombosis, or else a new embolus had lodged in some other section of the brain. This other section need not have been a portion of the motor area. A statement, this, that opens a question in cerebral pathology which I have not thus far presented to you. How is it, you ask, if there is a motor area, that we may have a lesion elsewhere and yet producing the symptoms of hemiplegia which were present towards the end of our patient's life? We cannot doubt the fact. The case is before you. The fact is accepted by the supporters of and the opponents to the theory of localizations. I state it in the words of Bastian (On Paralysis from Brain Disease, page 50): "In other instances an injury to one portion of the cerebrum or cerebellum, besides giving rise to its own set of direct symptoms, may also produce symptoms of a stimulating or an inhibitory type upon more or less remote parts. And such 'indirect' effects or symptoms may occasionally be of a more obvious nature than the direct effects. They may be brought about by simple mechanical means, as by pressure, or may be occasioned in a so-called reflex manner under

the influence of structural or functional relationship, the precise nature of which we are often unable to fathom."

It is very important that you should know this, that you may avoid the errors into which have fallen many interpreters of such cases. I give you an example. patient is admitted to a hospital unconscious and hemiplegic, and dies within four days of the admission. After so short a period of observation, with such evidences of general disturbance of the cerebral functions, Dr. H. D. Schmidt, of New Orleans, failing to find the lesion in the motor area or track, publishes the case as one disproving the theory of localizations.\*

I regard then as indirect the symptoms of hemiplegia in our patient, and I may add that, had he lived, they would have

disappeared rapidly.

The lesion we are discussing involves portions of the hemisphere the functions of which have not been determined. part, however, the angular gyrus, belongs to what would seem to be the sensory area. Dr. Ferrier localizes the centre for vision in this convolution. It is to be regretted that I did not examine into the state of this special sense after the manifestation of the late symptoms in our case. I believe, however, that I may confidently state that he was not blind of both eyes.

One very interesting feature of this case is found in the pathological changes discovered in the medulla. They are not as far advanced as the first examination led me to suppose. There are some evidences of proliferation of the neuroglia, but the deficient character of the examination bars me from arriving at any positive conclusion, though I consider it pregnant with I think I am justified in consuggestions. necting this lesion with the respiratory symptoms of the patient,—the tidal or Cheyne-Stokes respiration. This symptom is met with in cases of cardiac failure,

and also in some cerebral affections, especially meningitis. It is probable, it seems to me, that under all circumstances the phenomenon is due to some disorder of the respiratory centres. The engorgement of the vessels of the brain, consequent upon heart disease, may set up the proliferation of connective tissue in the medulla, a bulbar sclerosis, which is possibly the cause of the respiratory symptoms. I may state that in the course of disseminated sclerosis, intense dyspnæa may set in, indicating, with other features, the involvement of the medulla, through I am not aware that Professor Charcot describes any cases presenting this peculiar form of respiratory disturbance. I am anxiously waiting for the microscopical examination of the medulla in another case of heart disease, in which, during life, I observed the tidal respiration, together with other symptoms of descending sclerosis. I hope to make this the subject of my remarks upon some future occasion.

Now that we have concluded the study of this case, let me answer the question which is uppermost in the minds of you all,—What is the practical outgrowth of this theory of localizations? If I cannot give you a very satisfactory answer, it is certainly not the fault of the facts, but our own. Do not conclude, therefore, that these investigations are useless. It is because many of us are so apt to abandon them, it is simply because we do not know enough about these facts, that we fail to find at present numerous practical applica-Yet I hasten to tell you that most successful therapeutic measures have been adopted, more than once, upon the basis of this theory of localizations. Symptoms pointing to the seat of the lesion have enabled the surgeon to decide upon the operation of trephining, at times with the happiest of results. Verneuil, Lucas Championnière, have devoted particular attention to this subject.

Before parting, gentlemen, let me hope that I have at least interested you in this attractive and important subject. I recommend to you particularly the works of one author whose name is prominently connected with all these investigations. have done nothing else but to place in your hands, so to speak, the luminous writings of Professor Charcot, of Paris, I am willing to trust for the rest to the fasci-

nating power of his genius.

<sup>\*</sup> I hope I do not misquote. Such is my understanding of the meagre account given by him in the New Orleans Medical and Surgical Journal for October of 1878. I may also state, in regard to Case No. III. of the same paper, that the boundaries of the lesion are not given with sufficient accuracy, and that any conclusions seem to me unjustifiable. It should be remembered that lesions in the gray matter of the corpus striatum do not give rise to well-marked or permanent paralysis. They seem to be centres for the "organization" of movements solely. It is only when the internal capsule is involved that we have complete hemiplegia. No mention of the latter is made in the report.

For another source of error, quite frequently met with in cases of aphasia, I refer the reader to an article by Dr. Broadbent, "A Case of Left Hemiplegia and Hemianæsthesia with Loss of Speech," Lancet, November 17, 1877.

REFERENCES.-Dr. Brown-Séquard's Lectures in the Lancet, 1876, pp. 211, 245, 279.

Carville et Duret in Archives de Physiologie,

Leçons sur les Localisations dans les Maladies du Cerveau. J. M. Charcot, 1876.

Theories concerning the Physiology and Pathology of the Brain, by E. Dupuy, Medical Times and Gazette, September 29 and November 3, 1877.

Bourdon, Académie de Médecine, October

25, 1877. Flechsig, Die Leitungsbahnen in Gehirn

und Rückenmark, 1876.

Hughlings Jackson, Clinical and Physiological Researches on the Nervous System. E. Dupuy, Physiology of the Brain.

Goulstonian Lectures on Localization of Cerebral Diseases, by David Ferrier, Medical Times and Gazette for November 23, 1878, and following numbers.

Pitres, Lésions du Centre ovale. Paris, 1877. Landouzy, Localisation dans les Maladies

cérébrales, 1878.

And numerous cases reported in the mediical literature of the day.

### ORIGINAL COMMUNICATIONS.

TREATMENT OF CHRONIC AND SUBACUTE RHEUMATISM THE USE OF THE SALICYLATES.

BY J. T. ESKRIDGE, M.D.,

Physician to the Catharine Street Dispensary.

HE efficacy of the salicylates in the treatment of acute articular rheumatism is corroborated by a host of observers. Prior to 1875, so far as I can learn, salicylic acid had not been employed for the cure of rheumatism. The Germans were the first to lead off in its use, both internally and externally. Drs. Stricker,\* Riess,† Traube,‡ Katz,§ Hildebrandt,|| Stenitz, ¶ and Teuffell\*\* were among the first of the Germans who gave the drug a fair trial in rheumatism and then published the results of their observations.

All the observers just quoted, with one exception (Riess, who seems a little sceptical), speak in high terms of praise of the use of salicylic acid in acute articular rheumatism.

During the years 1876-77, others on

\* Berliner Klinische Wochenschrift, Nos. 1 and 2 (1876),

\* Berliner Kinnsene woenensentin, 1967.
and February 21, 1876.
† Same journál, No. 7, 1876.
‡ Reported by Stricker in same journal.
② No. 4 of the Deutsche Medicinische Wochenschrift.
¶ Same journal, No. 7, 1876.
¶ Allgemeine Medicin. Central Zeitung, March, 1876.
\*\* Würtemberg. Med. Correspond. Blatt.

Continental Europe, †† in Great Britain, †† and in America§§ added numerous testimonies to the value of salicylic acid and its preparations in the treatment of rheuma-

In comparison with the large number of carefully-studied cases of acute rheumatism. but few of the subacute and chronic cases treated by the salicylates have been re-

Dr. Stricker | says, "Salicylic acid is of doubtful utility in chronic articular rheu-matism;" also, "It is not likely to be of use in gonorrheal or diarrheal rheumatism, or in the polyarthritis attending septicæmia." Dr. Stenitz¶¶ says, "I have used it in several cases of chronic articular rheumatism, but without effect." Mr. Napier, \*\*\* in speaking of salicin in subacute rheumatism, says, "Salicin affords some relief, but its action in such cases has given uncertain results in my hands." Among the conclusions of an article on "Salicin and Salicylic Acid in Rheumatism," ††† we find this: "In the low form of acute and in chronic rheumatism its beneficial action is extremely doubtful." Lépine and Jaccoud think it has but little power over chronic forms of rheumatism. †††

On the other hand, Germain Sée gives in his memoir §§ twelve cases of chronic rheumatism either cured or improved by He states, "The articular this agent. tumefactions considerably diminish, and the motions of the joints may become free even after years of pain, rigidity, and immobility, on the condition that the bony lesions have not become too deep-seated or too advanced." Prof. Senator || | speaks favorably of its use in chronic rheumatism: "In several cases of chronic rheumatic inflammation following rheumatic fever, as well as in other cases of rheumatoid arthritis, and in two cases of true gout, salicin rendered decided service, not only in reducing the pain (sedative action), but

August 4, 1877.

<sup>\*\*</sup> See abstract in the London Lancet for December 1, 1877, of the discussion in Paris, by Sée, Oulmont, Hérard, Mussey, Ferrard, Beaumetz, Desnos, Bouchardat, Jaccoud, Lépine, and others.

†† See paper by Dr. E. H. Jacobs, West Riding Med. and Chirurgical Society, Charing Cross Hospital, and other London Hospital Reports.

†† Boston City Hospital Report for 1876, etc.

Berlin. Klinische Wochenschrift, Nos. 1 and 2 (1876), and February 21, 1876.

also in reducing the swelling of the parts." Sée gives other records to prove its efficacy, -one record\* of five of subacute, and anothert of thirty-three cases of the same form, all successfully treated by salicylic acid or its compound. Of the record of thirty-three cases, he says, "There was not one case which was not cured in two or three days." Among the French, confirmatory opinions have been expressed by MM. Oulmont, Guéneau de Mussey, Ferrard, Beaumetz, Desnos, Bouchardat, and others. From the conflicting opinions respecting the value of the salicylates in chronic and subacute rheumatism, one would not be inclined to trust many cases solely to this agent. I should scarcely have given the salicylates a fair trial in this form of the disease, had not the various remedies ordinarily used in its cure so signally failed, in my hands, of giving Iodide of potassium has given me negative results in one hundred cases of chronic and subacute rheumatism this year at the Catharine Street Dispensary. have clinical notes of one hundred and sixty-five cases of these forms of rheumatism variously treated. Some were given no internal treatment, and these seemed to do as well as those treated by the iodide of potassium.

The whole number of cases treated with the salicylate of sodium is twenty-two, the clinical history of a few of which I will first give, and then the conclusions at

which I arrived.

Case I.—E. M., colored, female, æt. 79, stated that she had suffered for four years with subacute rheumatism, affecting nearly all the joints, and had received all the usual treatment. She was ordered one and a half drachms of the salicylate of sodium daily, in six doses.

Second day.—She stated that the pain was nearly gone, and that her joints would bend much better. Locomotion was still very poor. Ordered one drachm of the salt to be taken

during the next twenty-four hours.

Third day.—Pain gone, feels much better, sleeps well, appetite and locomotion improving. Ordered three drachms of the salicylate to be taken in four days. She was not seen again for nearly three weeks, when she again came for more of the salicylate of sodium. She stated that after she took the salicylate last ordered, she felt so well that she thought it useless to return for more medicine, and had been out washing for several days, when,

on getting her feet wet, she took a severe cold, and the rheumatism again returned. She was again given the salicylate of sodium, with almost complete relief in three or four days, locomotion being better than it had been for some years.

Case II.-C. G., female, æt. 33, had been troubled with pain and stiffness in her shoulderjoints and wrists for many months; no heart trouble, never had had acute rheumatism, no fever nor swelling in the affected joints. She first came to the dispensary on March 28 of this year, when she was given tonics, and an alterative consisting of iron and cinchona and the iodide of potassium. On this treatment she was kept till April 28 (just one month), without receiving any appreciable benefit. At the last date she was ordered a drachm of the salicylate of sodium daily for four days, when the pain and stiffness in the joints had been entirely relieved. She was now ordered ten grains of the salt four times daily for a week, to prevent relapse. On June 20 she again returned, complaining of some pain in the joints, which was promptly relieved by the timely use of the salicylate before given.

The next two cases are similar, in many respects, to Case II., but, as they serve to illustrate the good effects of the salicylate, I shall briefly give their history.

Case III.—E. H., female, æt. 20, a factorygirl, and suffering from pain and stiffness in the right hip, left knee, and ankle-joints, with some swelling. She was treated from April 16 to May 24 by liniments, iodide of potassium, iron, and cinchona, without any apparent benefit. On May 24 I ordered one and a half drachms of the salicylate of sodium to be taken the first day, and on the two following days a drachm each. On May 27, the fourth day after beginning with the salicylate, she said the pain had entirely gone. She was ordered ten grains of the salicylate four times daily. On the 31st she reported herself well.

There is a form of pain, discoloration, and swelling of the knee-joints, somewhat resembling rheumatism, and by some so classed, over which the salicylates have no control. It resembles rheumatism in some respects, yet in others it is unlike it. I suspect it to be specific in its nature. I have seen only three or four of such cases, the clinical record of one of which will illustrate what I have said.

Case IV.—Mrs. H. B., æt. 40, has three children of rather a scrofulous habit. May 7, 1878, she suffered from pain and soreness in both knee-joints, rendering her almost unable to walk. She had slight fever, attended by great depression; appetite poor, bowels regular, pulse rapid, small, and compressible.

<sup>\*</sup> London Med. Record, January 15, 1877 (abstract). † Lancet, December 1, 1877 (abstract).

She stated she had been troubled with pains in her legs for several months, which were at times worse at night. There were no sensitive spots or nodes over the crest of the tibia, nor were there other symptoms pointing to a spe-cific trouble. On examining the knees, I found a red and swollen spot about one and a half inches in diameter over the anterior portion of the internal condyles of each femur, just internal to the patella. swollen and discolored spots were very sensitive to pressure; pain of late so great as to prevent sleep at night; no history of a blow or of any injury to the affected parts. While the discolored parts were very hard and sensitive, with no evidence of suppuration, other portions of the joints were tolerant of manipulation, and by striking forcibly upon the heel, the legs being extended, no pain was com-plained of. The salicylate of sodium in large doses failed to do her any good, but under the use of iodide of potassium her symptoms soon subsided.

In an article in the London Lancet for November 3, 1877, it is stated that the rheumatic cases in which the salicylates seem to have little or no good effect have for their "main features a comparatively low temperature (about 99°), little or no redness of the affected joints, or, if present, the redness is in more or less circumscribed patches, severe pain, accompanied by great depression." The symptoms just quoted are those that were most prominent in Case IV., just given. These may be cases of pure rheumatism, but the effect of the iodide on them is such as is usually found in cases of a specific nature only. A much more extensive observation is needed to determine their true nature.

The good effects of the salicylates have been mostly praised in articular rheumatism, but that they are not wholly void in the treatment of the muscular variety the following case will show.

Case V.—J. D., a strong, healthy-looking Irishman, is a frequent sufferer from severe and obstinate lumbago. I gave him one and a half drachms of the salicylate of sodium in the beginning of one of these attacks: in twenty-four hours his pain was gone.

When the joints are distorted in chronic rheumatism and probably disorganized, the salicylates have but little effect, except

sometimes in relieving pain.

Without a further recital of clinical cases, I will, in conclusion, only say, of twenty-two cases of chronic and subacute rheumatism treated by the salicylate of sodium, in not one did the medicine have

only negative virtues, but in every instance its action was rapid. Especially was this so in relieving the pain. The more acute the case, the more decided were the effects obtained. In the most chronic cases the medicine under discussion either promptly ameliorated or entirely relieved the pain: and in the subacute variety, by continuing its administration for several days or even weeks after all the symptoms of rheumatism had passed away, a recurrence of pain on re-exposure to cold and damp was of rare occurrence in those cases that I was able to keep under observation. How long this immunity from the disease will last I am not prepared to say. agent which is so prompt in relieving the distressing symptoms of the disease may, after persisting in its use for a considerable length of time, aid in eradicating it from the system, I do not doubt. For its permanent effects to prevent relapse, I am in the habit of giving ten grains four times daily, for weeks after all symptoms of the rheumatism have passed away.

## CASE OF SNAKE-BITE.

BY A. IVINS COMFORT, M.D.

E DDIE JEFFRIES, 6 years of age, weighing about fifty pounds, was bitten by a rattlesnake on the dorsal aspect of the right hand at nine o'clock A.M., August 31, 1878.

The lad ran home, only a few yards distant, screaming in great terror. After the lapse of fifteen minutes, whisky was administered freely, even to inebriation, and monosodic carbonate (bicarbonate of sodium) moistened in whisky applied to the wound. Strong aqua ammoniæ, however, was substituted for the above mixture as a local application shortly afterwards.

A bandage, too loose, however, to be effective, was applied to the arm immediately

above the elbow.

The parents failed to send for me until some hours later, so that when I arrived it was about

twelve o'clock (12 M.).

Four well-marked punctures, two of the poison-fangs of the upper jaw and two of the principal fangs of the lower jaw, were plainly visible. These punctures were apparently about two lines in diameter; they were equidistant, occupying the relative position of the angles of a quadrangle whose sides would measure an inch and two lines. In the immediate vicinity of the bite there was little or no swelling, gangrene of the part having taken place at once, yet the hand and forearm four inches above the wrist were greatly swollen and of a livid color, with a polished appear-

indulged.

ance; the fingers were semi-flexed and separated. The lad was delirious, his hearing was somewhat obtunded, his eyes were closed, the upper eyelids and the superior rectus muscles were paralyzed, the pupils were slightly dilated and insensible to light, and vision for the time being seemed to be wholly destroyed. The eye was directed forward, but upon the forcible opening of the lids was directed externally to exclude light, not upwards as is usual.

The facial aspect was that of composed indifference, with marked prostration, apparently devoid of suffering; the lips and cheeks presented about their usual redness. There was no pulse at the wrist, yet by auscultation the heart's action was found to be rapid, about one hundred per minute, its impulses feeble, and the interval between systole and diastole wonderfully brief. The respirations were about thirty per minute. The skin, particularly at the extremities, was dry and cool, though not cold. The temperature, taken with some difficulty in the axilla of the left side, recorded 964° Fahr.

The patient suffered from repeated attacks of emesis, vomiting at first undigested particles of food mixed with a green fluid, subsequently a thick vitreous mucus resembling the white of an egg slightly tinged with yellow. Micturition, shortly after my arrival, for a time became frequent, but subsequently subsided, the patient finally passing urine of a very diarrhoea was established about the same time, with tormina and tenesmus. At one o'clock P.M. thirst became imperative: this was freely

The bandage, immediately upon my arrival, I converted to a "Spanish windlass," and secured so tightly as effectually to occlude the vessels of the arm. The swelling as early as one o'clock P.M. had reached the bandage, and here seemed to be securely arrested, though well-marked livid lines followed the course of the superficial cutaneous vessels above the bandage, showing the probable disintegration of those vessels, with extrava-

sation of blood.

Great restlessness, accompanied with feeble jactitation, was a prominent symptom in the case from twelve o'clock M. to three o'clock P.M.; this, however, was alternated with periods of quiet repose; occasionally feeble, plaintive screams were uttered deliriously. Paralysis of both of the upper extremities, particularly below the elbows, and in a more marked degree of the lower extremities, was plainly manifest. My patient made repeated ineffectual efforts to stand, but, as often as he raised himself upon his elbows and knees, or knelt erect, he fell helplessly upon his side.

I regarded the case from the first as hopelessly fatal, from the following circumstances. Against a lethal quantity of ophidious venom there is, unhappily, no known antidote. Of the eighty remedies used as such, all are inert. The age and size of the patient were such as to preclude all chances of recovery.

The snake was of the largest of his species, nearly four feet in length, and apparently in full vigor of health. In consequence of the continued heat of summer, snakes are known to possess an abundant supply of virus; in the spring, after hibernating or during the period of desquamating, they are more harm-

less and less aggressive.

It is stated on high authority that the fatal cases of snake-bite are the exception, and not the rule. The escape from death is usually due to the fact that sometimes the convexity of the injecting fangs strikes the victim, the points are retroverted, and the virus is discharged into the mouth of the snake, while the principal and opposing fangs of the lower jaw, comparatively harmless, inflict the wound. Again, a snake may have exhausted its virus upon a recent victim, and consequently have become comparatively harmless, or it may be deficient in virus in consequence of ill Again, a snake may be rendered comparatively harmless in consequence of having broken off the injecting fangs in a previous encounter. The character of the punctures and the gangrene of the part in the immediate vicinity of the wound effectually eliminated from the premises the existence of the above circumstances.

As three hours had elapsed after the infliction of the injury and prior to my first visit to my patient, excision or cauterization of the wound was unnecessary. I therefore administered a hypodermic injection of ten minims of aqua ammoniæ fortior diluted with water, and ordered thirty minims of the aromatic spirit of ammonia to be given every hour, and also one-half ounce of whisky. I also ordered one-half ounce of new milk every hour as a nutrient. Under this treatment reaction was established, the pulse returned at the wrist of the unaffected side, and vomiting ceased. At three o'clock P.M. my patient expressed himself as feeling better, and complained for the first time since my arrival of

pain in his hand.

At eight o'clock P.M. the arm was more swollen; large blebs had formed in various places on the injured limb, the skin had burst at the flexure of the elbow, and extravasated blood was escaping from the arm, though the quantity was small. His nervous forces had recuperated to a remarkable degree, the restlessness and jactitation had quite ceased, and the sense of taste was normal as from the first.

Vision and hearing had again become normal, and intellection had been re-established, as in health, though he was disposed to sleep: this I encouraged rather than prevented. Respiration, however, remained at thirty per minute, as at mid-day, and the pulse again, having nearly disappeared at the wrist,

was still beating at its previous rate, one hundred per minute; his temperature, taken in the axilla of the left side, was 97% F.

He complained of not a little pain in the breast, and in my absence, his mother informed me, he twice suffered from convulsions, which, however, were not violent, and at four o'clock, in violation of my orders, she loosened the bandage, because, as she alleged, "his hand pained him so." This had the effect of permitting an additional increment of virus to enter the circulation from the affected limb.

At half-past nine P.M. I left the house, and on my visit the following day I learned that the lad had died at half-past two o'clock A.M.,

September 1.

Though death from snake-bite usually takes place from apnœa, I am of the opinion that it was caused by syncope in this instance, as had respiration diminished in frequency or become labored—the result of paralysis of the pneumogastric, phrenic, and respiratory nerves—it would have been observed by the family: on the contrary, they state that the patient "went off" suddenly, "all at once," when they were least expecting it.

I failed to obtain an autopsy, but the face bore a slight hue of saffron, and the posterior margin of the ears was livid, as were also the right hand and arm.

FORT WALLACE, KANSAS, September, 1878.

### GLEDITSCHIN—A NEW ALKALOID.

BY B. F. LAUTENBACH, M.D.,

Assistant to Prof. Schiff.

S OME time since, I commenced a series of investigations to determine the effect of various extracts of the fruit of the Gleditschia triacantha and G. ferox, cultivated trees growing in the parks in the vicinity of Geneva. The ripe fruit of the G. triacanthæ was formerly, and perhaps is still, used in the northern United States for the preparation of a liquor.

In these investigations it was found that a watery, alcoholic, or ethereal extract of the ripe fruit and seeds of these trees exerted almost no toxic influence on frogs and toads. When, however, an alcoholic extract of the unripe seeds and the portions of the fruit immediately surrounding these\* was used, very active poisonous effects were observed. In from five to twenty minutes the frogs were in a profound state of stupor.

No reflex movements could be excited by any of the known means, though at that time the motor nerves still remained irritable. This loss of reflex activity was not due to loss of function of the sensory nerves through the direct action of the poison on these structures, as, after ligature of all the blood-vessels of a limb, irritation of that limb failed to produce reflex movements when the animal was poisoned with the extract. The heart continued to beat for hours after these symptoms appeared. If a not too large dose was given, the animals recovered after having been in this state for twenty-four hours.

The question now was to determine the nature of, and isolate, the principle on which the activity of this extract of gle-

ditschia depends.

Were it a glucoside, it would almost certainly be extracted by water. Watery extracts, hot or cold, are, however, inert if no alcohol was used in their preparation. Again, a solution of the extract from which the coloring-matters, the tannic acid, and the inorganic salts have been removed, does not, as do all glucosides, yield glucose when boiled with dilute acids.

Further investigations showed the active substance to be an alkaloid. The manner in which I first isolated it is as follows. The unripe seeds and portions of the fruit surrounding them were bruised and mixed with absolute alcohol and absolute ether in the proportion of four parts of the former to one of the latter. The mixture was then heated over a water-bath in a Florence flask (in the cork of which a long glass tube had been placed to allow the distillate to cool and run back into the flask) for eight hours. The mixture was then filtered. and a small portion of the filtrate was injected into a frog. It was found to be very active. To get rid of the tannic acid the filtrate was now treated with gelatin and again filtered. To the alkaline filtrate dilute sulphuric acid was added until the solution became neutral. A dense white precipitate was now seen to fall, supernatant liquid was removed, and the remainder was allowed to crystallize spon-The crystals were dissolved in taneously. water, and lime was added to remove the sulphuric acid.† The resulting mass was again filtered and allowed to crystallize.

The crystals which were obtained were

<sup>\*</sup> The remainder of the unripe fruit is practically inert.

elongated rhombs, almost completely insoluble in water, but readily soluble in alcohol. They leave no "ash" when heated on platinum. The alcoholic solution is alkaline, and with dilute sulphuric acid (1-15) gives a dense white precipitate, which microscopically was found to be composed also of elongated rhombic crystals, whose angle, however, was much smaller than that of the gleditschin crystals. Both the original crystals and the sulphate produced in frogs and toads the symptoms before described. The sulphate is soluble in water.

This process I have since modified by adding lime to precipitate the tannic acid with the alcohol and ether. This is preferable to the gelatin method, as the latter takes some of the alkaloid along with it.

Gleditschin, as I propose to call this new alkaloid, forms salts with sulphuric, nitric, hydrochloric, acetic, and tannic acids. All these salts crystallize in modifications of the rhomb.

The facts which I have determined thus far respecting the physiological action of this substance are here briefly given; in a later publication this subject will be treated more fully.

Locally applied to the blood of mammals, like saponin, it causes the blood-corpuscles to disappear. These corpuscles, however, later reappear.

The heart of frogs continues to beat long after all other signs of life have disap-

peared.

The vagi of frogs poisoned with gleditschin still retain their inhibitory action on the heart.

The first symptom produced in frogs is a state analogous to sleep. Following this, rapid abolition of reflex activity takes place, and respiration ceases. The galvanic irritability of the nerves is much diminished.

### PUSTULAR ERUPTION IN PYÆ-MIA.

BY COMEGYS PAUL, M.D.

In an extract from a paper upon this subject, published in the American Journal of the Medical Sciences for October, the writer concludes that a pustular eruption is not only a rare occurrence in cases of pyæmia, but "is the avant-coureur of approaching death." The literature of the subject would seem very certainly to

warrant this conclusion. The few recorded cases are, therefore, perhaps of more interest than value, unless pustules may be of importance in diagnosis in connection with effusion within joints, where they may help to avoid the error of mistaking pyænia for articular rheumatism when other grave symptoms have not been sufficiently apparent, and in the absence of traumatism

A case of pyæmia in which pustular eruption was prominent came under my observation last March, the more observable features of which were nearly, if not precisely, similar to those of one reported by the late Dr. Anstie in the *Lancet* for

January, 1870.

G. R., æt. 26, colored, noticed an erysipelatous inflammation in the penis and scrotum, for which the ordinary remedies were used. The next day he had a slight chill, accompanied with a rapid and feeble pulse and a general feeling of discomfort. On the third day, pain and swelling in both elbow-joints followed, accompanied with vesicles and bullæ upon the thighs, abdomen, and arms. On the fourth day, the temperature rose to 103°, and many of the bullæ had developed into pustules. mean time the circumscribed erysipelas about the genitals had disappeared, and the patient now became delirious and exhibited signs of excessive prostration. The effusion within the joints increased, and the pain upon the slightest movement would seem for the moment to restore conscious-During this time the pustules were more or less numerous, not confined to any particular part of the body, and were in various stages of development. Death occurred on the following day.

The post-mortem appearances were not unusual. Hypostatic congestion over a limited portion of the lungs co-existed with purulent deposits. Secondary abscesses in the liver were more clearly defined than the pulmonary patches. The right elbow-joint contained a flocculent, puriform liquid, as did the left, but in less abundance. The other organs were not examined. There was more or less extravasation of blood, or ecchymosis, over

the lower part of the back.

Before this attack the subject was in apparently robust health, had a well-developed physique, and was unusually muscular. The continued and increasing prostration during the course of the disease

was on this account the more noticeable. The cause of the ervsipelas from which this disease resulted has not been made apparent. No previous illness or constitutional disease or unfavorable sanitary conditions can be made to account for it. October 17, 1878.

### HISTOLOGY AS AN AID TO THERA-PEUTICS.

CONTRIBUTIONS FROM THE HISTOLOGICAL LABORATORY OF THE UNIVERSITY OF PENN-SYLVANIA.

NO. I.

BY JOS. G. RICHARDSON, M.D.,

Demonstrator.

THE generation of old-fashioned doctors, members of which, as their patients will reverentially inform you, are "good in fevers," or "first-rate in dyspepsy," is frequently disposed to undervalue the services of our present invaluable instruments of precision, and loudly calls for examples of the direct practical benefit which all the new-fangled histological and pathological investigation has conferred upon the medical profession. meeting this not unreasonable demand the following suggestions are submitted, and, insignificant as they seem, I trust they may at least serve to stimulate effort in the

right direction.

Any one who has witnessed the action of dilute acetic acid upon the ciliary movement must have observed the surprising revival of the motion, after it had become almost extinct, under this influence; and hence it occurred to me to examine the effect of exposing the ciliated cells to an atmosphere charged with the fumes of vinegar. This is readily accomplished by attaching a small glass tube with sealingwax to each end of a microscope-slide, and inverting a cover, charged with ciliated epithelium from the beard of an oyster, upon Stricker's putty ring, as directed by Dr. Schaefer, following Prof. Stricker's ingenious method. Then, when all is arranged beneath the objective, draw, by means of a rubber pipe held in the mouth and attached to one tube, the vapor of boiling vinegar furnished by a funnel and another rubber tube to the small glass pipe at the opposite end of the slide.

It is easy to see, after having once thought of it, that the same potent stimulus to the action of the cilia beneath the glass cover of a

slide thus arranged must affect cilia in their normal position upon the mucous membrane of a patient who inhales the fumes of vinegar. Therefore, as this wave of ciliary movement has so much to do in bringing out the mucus (which, in bronchitis and similar diseases, is poured forth to excess) and thus freeing the clogged-up air-passages, we have, I think, in such a histological observation both an explanation of the old woman's cure for a cough in hot vinegar, and a strong incentive to use it—in spray from an atomizer or otherwise—more persistently and systematically in bronchitis and allied disorders. It would also guide us to employ it in opium-poisoning, in paralysis, and in all prostrating diseases when the lungs begin to fill up, probably in part as a consequence of enfeebled ciliary movement.

The intractable nature of chronic Bright's disease is so much a matter of universal experience that even a faint hope of greater success in its cure is worthy of consideration. One chance of successful treatment seems to lie, I think, in cutting off the supply of fat (for example, by an exclusive skim-milk diet) at the outset of the attack; and for this an early diagnosis of incipient fatty degeneration is necessary. Frequent observation of the remarkable power which osmic acid has of blackening and thus detecting extremely minute globules of fat, suggested the idea that this reagent might be advantageously employed in recognizing fatty metamorphosis in its commencement. and on trial I have found that osmic acid does enable us to discover in epithelial cells particles of oil so small as ordinarily to elude detection. The acid solution in water should be used, of the usual one per cent. strength, and this preparation, when secluded from the light, keeps perfectly well for months or even years. Its value in recognizing fatty degeneration elsewhere, as, for example, in the voluntary muscles, the heart, etc., is obviously great.

### A CASE OF PARTIAL PLACENTA PRÆVIA.

BY SEGUNDO ZERTUCHE, M.D.

RS. S., aged 25 years, married, in the eighth month of her third pregnancy, September 1, 1878, presented, at my first visit, some symptoms of general distress, and stated that she had had a hemorrhage about the end

of the sixth month, and another at the approach

of the eighth month.

September 15, I was summoned hurriedly by her servant, who told me Mrs. S. was dying. I found her comatose, with an imperceptible pulse, and still bleeding very freely from the vagina. On examination, I found the umbilical cord prolapsed about one inch in the vagina, also the os uteri rigid and dilated to about the size of a quarter of a dollar, with the placenta covering it. Detaching with the index finger sufficiently the placenta, I punctured the membrane, and, after the escape of the waters, tamponed. Half an hour later, on moving the tampon, the os was found partially dilated; the tampon was reinserted, and in forty minutes active labor came on, ending in speedy delivery, both mother and child eventually doing well.

23 N. NINETEENTH St., PHILA., Sept. 23, 1878.

# A CASE OF MALARIAL CONVULSIONS.

BY J. F. WALSH, M.D.

EARLY in the morning of September 12, 1878, I was called to see J. C., act. 2 years.

His mother stated that in the evening previous, at about six o'clock, he was seized with a severe chill, followed by a high fever, lasting during the greater part of the night; that he was very restless and had moaned and tossed about his bed until early morning, when, suddenly, at four o'clock he had a convulsion. This lasted for about fifteen minutes.

This lasted for about fifteen minutes.

When I arrived, he was lying quietly in a semi-stupid condition. His face was sallow and pinched-looking; tongue blue and tremulous; forehead bathed in sweat. Pulse rapid (140 per minute) and feeble. No fever. Very thirsty. I ordered a solution of quinine and another of bromide of potassium; the former to be taken three times a day, the latter

every two hours.

Returning again at twelve o'clock, I found him in a convulsion. It had just commenced. It lasted for about fifteen minutes, and was quite violent. This was the third one, the second having occurred, as I learned, at precisely eight o'clock; so that, very curiously, the attacks were exactly four hours apart. The mother noticed the periodicity of their occurrence as well as myself, and looked forward with dread to three o'clock for a repetition of the scene. I learned that he had not taken any of the medicine; he would spit it out as soon as administered. By holding his nose and pouring it well back into his mouth I managed to get some into his stomach, but not much. As he was very thirsty, I told the mother to mix the solution of the bromide

with his drinking-water, and only give it to him when he seemed quite thirsty. In this way, as I was told at a subsequent visit he took three of the doses of the bromide before three o'clock. At that time he had no convulsion, nor did he have any afterwards.

He appeared pretty well until the evening of the third day, when he had another chill, followed by a high fever, the temperature in the axilla being 105½°. The bromide was continued, and the solution of quinine was changed for pills, which he took more readily. That night he was very restless, and had slight twitchings of the muscles, but nothing more. In the evening of the fifth day he had another chill and fever, but much less severe. After this he was well.

In order to determine whether the convulsions might not be due to worms in the intestines, I gave him, on one of his well days, two good doses of santonin, followed by a cathartic. But, though he was purged very briskly, he passed no worms. His mother said that he had never had convulsions before.

CAMDEN, N. J.

### DEATH FROM FOUR HUNDRED AND EIGHTY GRAINS OF CHLORAL HYDRATE.

BY DR. J. J. CARROLL, U.S.A.,

Post Surgeon.

BOUT 7.30 P.M. on the evening of the 22d of October I was hastily summoned to the bedside of T. R., æt. 50, who had taken four hundred and eighty grains of chloral hydrate, with suicidal intent, about fifteen minutes before my arrival. I found him in a totally unconscious condition, respiratory movements quick, but not laborious. The stomach-pump was immediately introduced, and four ounces of fluid removed, after which the organ was syringed out with nearly six ounces of water, and stimulants administered. In about ten minutes respiratory movements ceased. Artificial respiration was resorted to, and kept up with the aid of electricity until 11.30 P.M., when he expired. The patient had suffered for the past year from chronic alco-holism and from the habitual use of chloral and morphia.

Autopsy, twelve hours after death, revealed extensive fatty degeneration of heart, fat being mostly deposited in the auriculo-ventricular and interventricular sulci, and almost covering the right auricle. Fatty degeneration of liver, enlarged, and very anæmic. The other organs and viscera presented no particular points of interest, with the exception of the brain and lungs, which were very much injected, and two small, ulcerated patches situated in mucous membrane of stomach near

CAMP McDowell, Arizona, October 25, 1878.

pylorus.

## NOTES OF HOSPITAL PRACTICE.

### COLLEGE OF PHYSICIANS AND SURGEONS, NEW YORK.

CLINIC OF PROF. ALONZO CLARK.

(Reported for the Philadelphia Medical Times.)

(Continued from p. 65.)

ENORMOUS HYPERTROPHY OF THE LIVER, WITH FIBROIDS.

THE next patient says he has a "large lump in his stomach," which he first noticed about seven weeks ago. Two or three weeks before that, however, he was obliged to give up work on account of pain and weakness. He says he has had no jaundice; but when I raise the evelid. at the same time asking the patient to look down, I can detect a slight tinge of yellow about the conjunctiva. He has vomited but once during his illness, and then the matter ejected was of a greenish color. He has no appetite whatever, and it is only with great difficulty that he can force down any food at all. When he does take any, to use his own words, he is all pains, and has to keep walking all night. His stomach gets filled with wind, and he is continually belching it up.

On making an examination we find that the man has a large belly, and when palpation is resorted to there is something felt which is resisting to the touch and seems like a board. Following the edge of this, about the level of the umbilicus, across the abdomen from right to left. I find, about two inches to the left of the navel and a little above it, a lumpy mass about an inch in diameter, and around it several smaller ones in the same vicinity. These can be felt with great distinctness under the fingers when the patient takes a deep inspiration. The whole extent of the hard, resisting mass spoken of is enormous, as determined by percussion. There is dulness over the right side of the chest in front, from a finger's-breadth below the level of the nipple all the way down to below that of the umbilicus; though the dulness is less marked in the lower portion of the area, on account of the thinness of the edge of the mass. The same dulness also extends over a very considerable portion of the left side of the chest. Of course, what we feel here is the liver; for nothing else could extend continuously over the regions noted. Normally the left lobe of the liver should reach about four and a half inches beyond the median line, but in this case it extends fully two inches farther. On actual measurement we find that the liver covers an area which is ten and a half inches in its longitudinal diameter and twelve and a half inches in its transverse.

We now come to inquire what is the condition of the liver here. In the first place there is enormous hypertrophy of the organ; but, in addition to this, there is something else present. From the character of the tumor, as indicated by the physical signs, we determine that it must be one of three things, viz. :

1. Multiple abscesses.

2. Carcinomatous growths.

3. Fibrous growths.
But the masses felt are too large and too hard for abscesses. On the other hand, real cancer of the liver is distinctly cupshaped, and I am therefore inclined to think that we have here fibroids, associated with hypertrophy of the organ. The fact that we have no more jaundice in this case is due, of course, to the small amount of compression to which the duct is subjected. The physical activity of which this patient is capable seems very remarkable in a man afflicted with a tumor of such great size as

The next question to be settled is. What can we do for him? In such a case as this it is proper enough to try the iodide of potassium, though I must confess that I have very little faith in it in this condition. The growth is entirely too extensive to be gotten rid of by counterirritation, however persistently employed, and the most that I think we can expect here is to prevent, if possible, the further enlargement of the liver. To this end the patient should avoid the use of all kinds of fat as much as possible. On account of the difficulty which he experiences in taking solid food, he will probably have to confine himself principally to a liquid diet, and the best articles for him to depend on will be milk and beef-juice, with the white of egg, taken raw, from time to time. do not understand exactly why he should have so much trouble in swallowing; but I suppose the œsophagus is probably pressed upon to a certain extent by the mass, the stomach being forced somewhat downward and backward. There is, however, no symptom of any stricture of the esophagus.

NEURALGIA PRODUCED BY LEAD-POISONING.

Our last patient this morning is a painter by occupation, who is suffering from pain under the left shoulder-blade and extending down as far as the hip. He first noticed it about six months ago, and it has troubled him more or less ever since; though there have been intervals when he was entirely free from it. Before this pain in the back and side commenced, he states that he used to have pain in the stomach and dizziness in the head a good deal; but he never has any pain in the bowels now.

If this trouble in the side is not pleurisy, it is probably neuralgia; and it is the more likely to be of the latter character from the fact that it extends so far down. When the chest is stripped, I find a point of considerable dulness about the angle of the scapula, and slight dulness lower down as compared with the right side. On auscultation the respiration is found to be natural all the way down, but the voice becomes somewhat indistinct at a point about a finger's-breadth below the angle of the scapula. When I first listened to the chest I thought there was probably some pleuritic trouble; but there does not really seem to be any at present, though there can be no doubt that he has formerly had an effusion, and that the pleura has become permanently thickened in one part.

On examining the patient's mouth we find a line of brownish discoloration along the border of the gums, which ordinarily denotes absorption of lead; and, taking into consideration the man's occupation, I think it more than probable that we have here a case of lead-poisoning. It is true that he has not as yet, apparently, had colica pictonum; but he tells me that he suffers a good deal from constipation, and slow bowels are often the precursor of this. The best way to get rid of the neuralgia, which undoubtedly depends on the presénce of lead in the system, is to eliminate the latter by means of iodide of potassium, and the patient should take ten grains of it three times a day. For the use of this agent in the treatment of lead-poisoning we are indebted to the researches of chemistry, and it was Melsens, of Brussels, who first directed attention to it. His experiments showed that a soluble compound was formed by the iodine with the lead in the system, and that this was gradually carried off from the system through the

agency of the urine. They were afterwards fully confirmed by a series of observations made at the New York Hospital. In the urine of patients suffering from lead-poisoning, before the treatment was commenced, no trace of lead could be detected; but when the iodide of potassium was being taken, quite a large quantity could be found in it. The proper method of treatment for lead-poisoning is, therefore, by means of iodide of potassium.

### TRANSLATIONS.

TREATMENT OF OVARIAN CYSTS BY THE ESTABLISHMENT OF A PERMANENT FISTULA WITHOUT GASTROTOMY.—In a recent communication to the Académie des Sciences (Jour. des Sci. Méd., 1878, p. 455) M. Tripier suggests the following treatment for ovarian cysts where for any reason ovariotomy cannot be performed. puts the cavity of the tumor in communication with the outer air by means of a fistula, and through this injects daily solutions of iodized water or soap, or solutions of tannic acid. Even cauterizations by means of the galvano-caustic may be made by this means, a long insulated sound being employed. In order to establish the fistula itself, M. Tripier employs the galvanocaustic by a method described at some length in the Moniteur Thérapeutique. He. only claims a certain value for this treatment, which has served the purpose of relieving some apparently desperate cases. As to the final result, M. Tripier can make as yet no positive assertions, the time which has elapsed since his operations not having been sufficiently long.

TREATMENT OF SUPPURATIVE ADENITIS. -Dr. Obissier ( Jour. des Sci. Méd., 1878, p. 451; from Bordeaux Médical) punctures the gland with an exploratory trocar to the depth of seven or eight centimetres, and, having evacuated the pus, injects a four per cent. solution of carbolic acid. This he permits to remain, closing the puncture with a bit of silk, which does not swell and enlarge the opening. injection is repeated by the same opening twice daily, and serum soon succeeds the In favorable cases a week suffices for the cure. Where the abscess is on the point of opening, three weeks are required, but the result is favorable.

INFLUENCE OF CUTANEOUS STIMULATION ON THE CIRCULATION AND UPON CALORIFI-CATION.—From M. Joffroy's thesis upon this subject, which has been analyzed by Le Progrès Médical for September 14. we extract the following facts. After a physiological introduction, including an account of the part played by the skin in regulating the bodily heat, the author studies the effects upon the circulation of cutaneous stimulation. These effects may be local or general, the former consisting in vaso-motor phenomena, constriction and dilatation of the vessels at the point excited. They are due to a reflex action of the special vaso-motor centres, and probably also to an action of the peripheral nervous ganglia, as yet not perfectly demonstrated. The general effects are more complex, and the results of different investigations are contradictory in some points. The following, however, may be asserted. The nature of the stimulus makes but little difference; its extent and intensity, however, are important. After feeble stimulation, acceleration of the general circulation, together with a manifest constriction of the arteries, and even of the veins, is observed. So soon as the excitation is withdrawn, the vessels return rapidly to their normal condition.

When a feeble stimulation is continued for a long time, constriction of the arterioles is induced which may last for hours. (Such is the effect of local applications of moderate cold, astringents, etc., etc.) Energetic stimulation produces at first acceleration of the blood-current, with marked constriction in the calibre of the vessels: these phenomena rapidly giving place to slacking in circulation, with dilatation of the vessels. After very violent stimulation, the preliminary stage of contraction is not noticed, dilatation of the vessels being produced instantaneously and becoming excessive. Such are the results of experiments upon animals. man, M. Joffroy thinks, the phenomena are more simple, and are confined to contraction of the vessels and increased rapidity of circulation.

The heart's action is also considerably modified by stimulation of the skin. Feeble stimulants cause accelerated action with strong contractions. First a brief acceleration is produced, then prolonged slowing. To explain these facts, which have long puzzled physiologists, M. Joffroy suggests

that a slight stimulus affects only the corresponding portion of the vaso-motor centres, a medium one the neighboring vaso-motor centres, while a still stronger stimulus acts not only upon the spinal but on the central vaso-motor ganglia situated in the bulb. By this means general modifications of the circulation are produced, including acceleration of the movements of the heart. When the excitation is carried still one step further, the pneumogastric is acted upon, and slowing of the cardiac movements is brought about.

The modifications of calorification, induced by the application of external stimuli, are more difficult to explain. It may be asserted, however, that feeble stimulation raises the central temperature, while stronger stimulation lowers it. Vulpian's explanation, that the changes in the cutaneous circulation are the cause of this, seems most reasonable. It has never been demonstrated that the nervous system exercises any influence upon animal heat without the intervention of the vascular system. With regard to the effect of hydropathy. M. Toffroy thinks that, as ordinarily applied, this acts very much as most stimulants of medium intensity. Thus, under the influence of a douche or of a cold bath, arterial tension is elevated, and the heart loses several pulsations per minute. M. Joffroy does not believe in the local operation of stimulants at a distance. concludes his thesis by a chapter on treatment, studying the effect of flagellations, sinapisms, ignipuncture, and finally hydrotherapy.

ROSEOLA FROM OUININE.—Dr. Grelletv reports (La France Méd., 1878, p. 586) the case of a patient who presented an eruption situated chiefly upon the limbs, both upper and lower, and characterized by a series of erythematous discs of variable size and without definite form, dull red in color, and disappearing under press-The eruption was almost perfectly symmetrical. It had been preceded by fever, but at the time of examination no disturbance of the general system was pres-This eruption was very puzzling to the physicians who first examined it. was not syphilitic roseola, since there had been no antecedent trouble of the kind, and since this is of a lighter color, the patches less extensive, and is seated by preference upon the trunk, which in the case under consideration was spared. The

patient had taken no copaiva, nor eaten shell-fish, nor had he eaten any other irritating food. After a time it transpired that he had taken eight grains of quinine on the previous evening, and later he informed Dr. Grellety that he always suffered such a rash after taking that medicine, which he had been accustomed to employ for the relief of obstinate intermittent When he took the quinine just before the attack the roseola did not show itself: excepting when it was taken near the attacks the eruption followed. Grellety alludes to the fact that these scarlatiniform erythemata are not uncommon among workers in quinine-factories, and refers to the thesis of Grissac (No. 15, 1876), the recent work of Delthil, and the article of MM. Proust and Bergeron published in Annales d'Hygiène, July, 1876.

The conclusions drawn by Proust and Bergeron refer first to the eruption found in workers in quinine and sulphate of cinchona, which is eczematous. That produced by the internal use of the drug seems to assume the erythematous form.

The eruption from quinine, say MM. Proust and Bergeron, should not be considered professional, since it appears to attack only those who show a certain idiosyncrasy or susceptibility. One attack predisposes to subsequent ones. It only requires emollient treatment, but the cause must be removed. Grellety also quotes, from Edward Garraway, the case of a woman who, after taking quinine, was attacked with cedema of the face and limbs, accompanied by a scarlatiniform rash. When the patient was cured, Garraway again ordered a small dose of quinine, which was followed two hours later by the same eruption. Grissac gives the case of a woman working in green silk (teinte de quinine), who, together with her infant, suffered from a violent eruption.

Dumas (Jour. de Thérap., 1876, p. 288) observed repeated attacks of urticaria accompanied by frightful itching following the use of quinine in small doses (fifteen centigrammes (two and a quarter grains) in three cases, thirty centigrammes in a fourth). In these cases reddish papules and erythematous patches were also noticed, together with coryza with abundant discharge. Later, the skin desquamated.

M. Grellety draws one practical conclusion from his observations. It is that in giving quinine to persons suffering from

malaria who are liable to these eruptions the drug should only be given at a distance from the time of the attacks.

TREATMENT OF WHOOPING-COUGH BY TINCTURE OF MYRRH.—Dr. Campardon (fils) sends an account of several cases of whooping-cough coming under his care where tincture of myrrh was employed with remarkable success. The conclusions which he draws from his experience are that whooping-cough yields rapidly to tincture of myrrh in solution of quinine, the latter being a useful adjuvant on account of its tonic effect on the debility so often observed in this affection. treatment does not preclude the employment of local or general measures for the tracheo-bronchitis, pulmonary congestion, The dose is about fifteen drops of the tincture of myrrh every one or two hours. (Bull. Gén. de Thérap., v. ii., 1878, p. 193.)

Cooling the Body by Local Refrigeration.—Clément, of Lyons (Bull. Gén. de Thérap., v. 2, 1878, p. 229), suggests a sort of jacket of rubber to be placed around the waist and filled with cold water, which may be renewed from time to time. A thermometer may be kept in the rectum to measure the reduction of temperature. A similar procedure, useful in local inflammation of a limb, is to envelop this in a long rubber tube wound spirally about it, through which cold water is caused to circulate.

BATIATOR: A SUBSTITUTE FOR IPECACU-ANHA.—Stanislas Martin, the well-known French pharmaceutist, calls attention (Bull. Gén. de Thér., v. ii., 1878, p. 74) to a new Brazilian plant which is used by the natives in intestinal troubles, particularly in hemorrhoids. M. Martin asserts its efficiency in dysentery and also as an emetic. It is given in the Brazilian manner by making a decoction of the bruised root, to be drunk from time to time by the patient. M. Martin describes the appearance of the crude root, but gives no chemical data, nor does he touch upon the physiological action of this new drug.

Tuberculosis of the Thyroid Gland.
—Chiari (Cbl. f. Med., 1878, p. 412) has examined one hundred cases of chronic and acute tuberculosis of other organs, with a view to ascertaining the relative frequency of tuberculosis of the thyroid. This he found in seven cases,—a percentage of frequency about equal to that of tuber-

culosis of the uterus, which is not considered of very rare occurrence. Histologically, the tuberculous disease showed itself both in the form of grouped caseous centres (tuberculous infiltration) and in that of single miliary masses (tuberclegranules), the latter variety exclusively as a single symptom of a general miliary tuberculosis.

INFLUENCE OF CONSTITUTIONAL SYPHILIS UPON THE COURSE OF GUNSHOT WOUNDS.— The influence exerted by various constitutional diseases or conditions of the system upon the course of wounds has engaged the attention of several investigators during the last few years, and Verneuil's researches are almost classic. Recently, Düsterhoff (Cbl. f. Chir., 1878, No. 38; from Arch. f. Klin. Chirurgie) has examined into the influence of syphilis upon the course of military injuries, with the following results. The infecting lesions of syphilis have no influence upon the course of wounds, though efflorescences may be determined in the neighborhood of the latter by irritation. Wounds in the immediate vicinity of the primary induration may heal by the first intention. Latent syphilis, early or late, does not, in general, influence the course of wounds: the rapid tissue-change during the process of healing seems to favor the continued latency of syphilis. In plastic operations, where signs of syphilis are still present, it is well to pursue an antisyphilitic treatment for a short time previous to the performance of the operation, in order to avoid slight loss of tissue about the point of operation. Tertiary forms of syphilis are, when progressive, unfavorable to the healing of wounds. Bone syphilis favors fractures and retards consolidation. curialism is wrongly supposed to favor fractures. A carefully conducted mercurial course does not hinder the formation of callus in syphilitic subjects. In inveterate syphilis, as bone syphilis, wounds often lead (in badly-nourished individuals in particular) to a specific variety of gangrene which is brought to an end by moderate antisyphilitic treatment. Constitutional syphilis does not predispose to hemorrhage, and stands in no relation to pyæmia. x.

INFECTIVE MYOSITIS.—Under this title, E. Galvagni (Cbl. f. Chir., 1878, p. 635; from Sardegna Medica) alludes to a publication of Nicaise in which are described three cases of acute diffuse purulent myositis accompanied by great general disturb-

ance and quickly followed by death. these G. adds another case of his own. where a young strong person was attacked by pain in the joints of the left hand and elbow. Six days later, no trauma having occurred, the patient experienced severe pain in front of the left thorax. Leeches were ordered, and on the next day G. found no pain in the joints; left præcordial region very painful, swollen but not cedematous, skin saffron-yellow far beyond the boundary of the swelling. Percussion painful, yielded dulness in front, normal sound behind. Vesicular murmur and sounds of heart weakened. Temp. 39°.4. Temporary diagnosis, pericarditis rheumatica. Ice-bladders were ordered. The next day, marked feverishness; the tumor increased in size, no ædema. On the twelfth day, fluctuation; puncture; exit of much blood and little pus. On the fourteenth day a deep incision gave exit to a quantity of foul pus. The next day, subcutaneous emphysema; secondary opening. Hectic and foul purulent discharge continued until the thirtieth day, when the patient died. On examination, the pectoralismajor was found mostly gangrenous, the portions remaining infiltrated with pus. The cavity of the abscess reached from the clavicle to the edge of the ribs. The third and fourth ribs were partly denuded of periosteum, the pleura-costalis here loosened and could be pitted with the finger. Nowhere perforation of the pleura. On the left side, recent fibrinous and serous pleuritis, left lung splenified. Pericardium in front inflamed and thickened, but the pericardial sac, heart, and vessels normal. Spleen enlarged but normal; liver showing a hazelnut-sized metastatic abscess. G. excludes phlegmon, and, in spite of the slow course of the disease, takes it for this peculiar form of myositis. He does not attribute the characteristic singular coloration of the skin to extravasation, but to the fever-process itself.

MM. REGNARD AND RICHER have applied the "graphic method" of M. Marey to the analysis and record of the epileptiform seizures of hysterical women, with the result of showing that even here, where disorderliness seems to be paramount, there is a more or less orderly series of phenomena. The interesting paper which embodies the results of their observations is to be found in a late number of the Revue Mensuelle de Médecine et de Chirurgie.

# PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, NOVEMBER 23, 1878.

### EDITORIAL.

THE MEDICAL DEPARTMENT OF THE UNIVERSITY.

THE opponents of the reformation in medical education at the University, when last year the astonishing success of the scheme was developed, asserted that the large classes were mainly drawn by the novelty and noise of the inauguration, and, pointing to the great falling off in the Harvard classes as they passed from the freshman to the senior year, predicted that with the University the loss would be still greater. So much was said that a good deal of anxiety was felt this fall by the friends of reform as to two points: First, would the number of new men entering be as large as last year? Second, would a fair proportion of the first-year men of last year continue their studies on into the second year?

It was known that about six per cent. of the class of 1880 failed in the examinations last spring, so that it was considered probable that the one hundred and thirtytwo freshmen of last fall would be represented by one hundred and twelve this autumn. Instead of this, however, the second-year class now amounts to one hundred and twenty-six, or within onehalf dozen of the full number who commenced their studies in 1877: so nearly is the loss made up by men who have brought up their studies during the summer, or who have entered the second-year University class from other institutions. It may be, therefore, considered settled that the attractions at the University are sufficient to hold its classes.

The number of medical freshmen who have entered this fall is one hundred and

twenty-one, against one hundred and thirty at the same period last year. This, of course, is a slight falling off,—probably the result of the pressure of the times, or of some other general cause operative upon all medical schools. Certain it is that the class at the Jefferson College has diminished this year, as compared with last, more than has that of the University. The success of the new plan adopted by the University may therefore be considered established, and to those who originated and achieved it is due the praise of having boldly followed their moral convictions of right and by their intelligent courage secured a great practical success.

I T has been abundantly proven, by evidence which we have from time to time laid before our readers, that, abroad, homeopathy has suffered such decline that its leaders are forced to acknowledge its fading supremacy. The supposition has been that in this country the inevitable decadence had not set in. The fall of the tide is, however, becoming almost as apparent here as abroad, and it is plain that in the lifetime of some of our readers the delusion will have become historic.

We chronicled, not long since, the doings of the New York Homocopathic Society,-how, to use the expression of one of their members, adopted by the New York Herald, the majority had resolved that their lives were "living lies." Now we pause to note the paper of Dr. H. M. Paine, a prominent homeopathist of Albany (Homeopathic Times, October, 1878). In this he says, "We are forced to the conclusion that there is, in all probability, a gradual decrease in the number of homœopathic practitioners," and further asks the pregnant question, "If the powerful influences which are now in active operation continue unchecked, will not the efficiency and influence of the Homœopathic School, as a distinct body of medical men, be greatly impaired, and

its ultimate disintegration merely a question of time?" The natural reply in brief is:—Certainly.

THE third part of The Journal of Physiology, edited by Dr. Michael Foster, is now published. Already the influence of this periodical in stimulating in England the study of the most important of the fundamental sciences of medicine is apparent. It is plain that there will be no lack of firstclass material for its pages; and we would urge our readers to sustain it by subscribing for it or by getting the book-clubs and public libraries of their neighborhoods to subscribe. It speaks well for the culture of the physician upon whose table it may lie, but it may not be a necessity in the office. Not to have it within reach, however, not to be able to glance over it as it appears, and read papers in it here and there, is a hardship which we trust no subscriber of the Times will suffer. upon the libraries taking it.

## LEADING ARTICLES.

METALLOSCOPY AND METALLO-THERAPY.

A LEADING article in the number of this journal for April 13 of the current year described, under the title of Metallotherapy, a curious and comparatively new method of treatment for that form of severe hysteria called hysteroepilepsy, in which, in addition to the epileptic seizures, anæsthesia or hemianæsthesia, amyosthenia and amblyopia, are frequent symptoms. This method, according to its chief exponent, M. Burq, consists essentially in the external or internal use of certain metals varying in each case according to the idiosyncrasy of the patient. The process of ascertaining this idiosyncrasy is called metalloscopy: it is performed by applying bits of any given metal to the skin of the arm on the anæsthetic side. If the patient is sensitive to the metal selected, a numbness is felt in the arm at the end of a few minutes, and, if the skin is pricked with a needle, sensibility is

found to have returned, wholly or in part. If the metal tried does not produce this effect, another and another must be employed until finally the metal to which the patient is sensitive is ascertained. If the metal is kept applied to the skin, the effect produced by it wears away in time and the recurrent anæsthesia is more intense than previously. If, on the contrary, the metal be taken away so soon as sensibility returns. this persists for several hours or days and the improvement may become general. But sooner or later the patient relapses again. Occasionally what are termed "transfer phenomena" are observed. The effect of the metal placed upon the anæsthetic arm is to cause anæsthesia upon a corresponding patch of the unaffected arm. this condition appearing here pari passu with its disappearance upon the former That form of amblyopia called achromatopsy, or narrowing of the field of vision with respect to colors, is also favorably influenced by this application of

After metalloscopy has pointed out the appropriate application in a given case, then metallotherapy, either external or internal, comes into play. If external metallotherapy is to be employed, plates of the requisite metal are bound upon the skin; if internal metallotherapy, some salt of the metal is given by the mouth.

Although Burq's observations were first published twenty-five years ago, they did not attract much attention until recently, when the theory was taken up by the distinguished Prof. Charcot, who has investigated the subject with so much enthusiasm as to excite very general interest. The leading article referred to was based chiefly upon some lectures delivered by Charcot last winter; but since then new facts and investigations have been published, and it will be profitable to examine the subject once more in the light of these.

A committee of the Société de Biologie, consisting of MM. Charcot, Luys, and Dumontpallier, was appointed to investigate the subject, and in their report they state substantially the same facts as those above related. As to the cause of the phenomena undoubtedly produced, M. Burq advances the theory that superficial currents of electricity are produced by the contact of the metal (which is an amalgam) with the moist skin, that slight oxidation takes place, and that an electric current is thus

formed. He considers that these currents exercise an influence over the vaso-motor nerves, by means of which the blood-supply is restored to the anæmic parts and sen-Miss Hart.\* who sation re-established. had an opportunity of watching a metalloscopic demonstration by M. Charcot, was struck by this change in the blood-supply. Before the application of the bracelet of metal a needle might be thrust through the arm on the anæsthetic side without eliciting a sign of pain or a drop of blood. quarter of an hour after the application, a prick at the same spot would call forth a cry of pain and an involuntary start, and a puncture would cause the ordinary bleeding. MM. Charcot, Rabuteau, and Onimus lean towards Burg's interpretation of the metalloscopic phenomena, but with some reserve.

In addition, however, to the phenomena noticed by Burg, the commission has ascertained the fact that feeble electric currents may give rise to symptoms similar to those produced by the external application of metals, and that in this case also "transfer phenomena" may be observed. One of the most surprising results gained by the investigations of the commission was the persistent return of sensation in patients with whom the hemianæsthesia was due to

an organic cerebral lesion.

A later report of this commission, published in the British Medical Journal (1878, vol. ii. p. 548), deals more particularly with M. Burq's proposition that "the external metallic aptitude being known. the same metal administered internally will determine similar results to those brought about by its external application." The experiments made by the commission were conducted with the greatest care, being performed upon the patients who had been the subjects of the metalloscopic examination. The hysterical condition of the patient was ascertained in the first place, and then the medicine was administered either by M. Charcot himself or by his internes. The results of these experiments were again confirmatory of Burq's views. patients all did well under the appropriate metal.

various localities, though sometimes confirmatory, do not, however, invariably uphold the judgment of the commission. M.

The observations of other physicians in

Magnan at the Asile Sainte-Anne, and Dr. Westphal of Berlin, have been unable to gain the results obtained by Prof. Charcot. Dr. Hughes Bennett has obtained as good results in "metalloscopic" examinations with bits of wood as with plates of metal, while Dr. Thomas Inglis has obtained "transfer phenomena" by the use of a mustard plaster. Mr. Ernest Hart, in an editorial in the same number of the British Medical Journal from which we have taken most of the facts above mentioned, sums up the present state of our knowledge with regard to metallotherapy, and points out the extreme probability that sooner or later "expectant attention" or some similar explanation will be found for these phenomena.

### PROCEEDINGS OF SOCIETIES.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

T a conversational meeting, held at the Hall of the College of Physicians, Philadelphia, October 23, 1878, Dr. Henry H. Smith, President of the Society, in the chair, twentyone members were present. Drs. B. Trautman, L. D. Judd, John H. Williams, and J. R. F. Bell were introduced as members, and signed the Charter and By-Laws.

The question of the publication of the reports of these proceedings in various medical journals being introduced, it was decided, unanimously, that no report of the proceedings should be published except by the *Philadelphia Medical Times*.

The paper of the evening, upon the evils of Abuses of Medical Charities in Philadelphia, under the title of "Which is to Blame?" was read by Dr. W. R. D. Blackwood. This was accompanied by a map of the city of London, showing the ramifications of the public medical charity system in that city, and the abundance of medical dispensaries.

Dr. H. Leaman reported a case of zymotic disease (typhoid) acquired by a patient while

in a hospital for a surgical injury.

On motion of Dr. Benjamin Lee, the paper was referred to the Committee on Hygiene and the Relations of the Profession to the Public, which has had the entire subject under consideration.

### SCARLATINAL SORE THROAT.

Dr. F. Woodbury said that he had been interested in watching the course of an epidemic, or rather endemic, of sore throat, that he believed to be connected with scarlatinal poisoning. In a family living next door to a case of typical scarlatina, there were seven children, the oldest fifteen years, the youngest eight months.

<sup>\*</sup> London Medical Record, 1877, p. 440.

The oldest, a girl, recently had a severe sore throat, lasting a few days; but, as she kept at her housework, and had no other symptoms. medical attendance was not sought. next, a boy of twelve years, woke up one morning feeling badly. He could not sit up. and complained very much of his right forearm, which he had accidentally struck the day before. He had gone to bed in his usual health. When seen, the arm was swollen, but a contusion was the extent of the injury. A close examination, however, showed a few points of red eruption, resembling morbilli or rubeola, on both arms, but on no other portion of the body. The skin was dry and hot, pulse moderately accelerated: there was no corvza or conjunctival irritation. The fauces and pharynx were deeply congested and swollen, no false membrane, tonsils enlarged, some prominent glands below the angles of the lower jaw. Ordered to gargle with infusion of black tea, and apply bacon to the neck. Diet chiefly milk. A dose of magnesia was also directed to be given. A prescription was left for chlorate of potassa mix-ture, which, it was subsequently learned, was not filled. The boy was mildly delirious during the night, but was better the next day. On the third day he was up and about, with the fauces still purple, but less swollen, but he suffered no further inconvenience. At this visit the next younger child was found to have the same condition of the throat, although she had been well the day before. No eruption whatever could be detected. She also had fever, but less marked than her brother. The same treatment was instituted. This was on a Sunday, but something interfered to prevent the physician from calling again until Wednesday, when she was found convalescent, but her younger sister was on the lounge, suffering from the same train of symptoms. The urine had been examined, and found loaded with urates, but contained no albumen. The family being poor, no isolation of any efficient character could be carried out. The chlorate of potassa mixture was given to this child, who was the last one attacked. All recovered. The baby was not attacked.

#### DISINFECTION IN ZYMOTIC DISEASE.

In reference to protection from zymotic disease, Dr. Woodbury spoke of a tenement which, owing to its having no cellar and no drainage, was the home of diphtheria. He was cognizant of two outbreaks of the disease in this house. The place had been reported to the Board of Health, who had sent an ordinary non-medical inspector to examine the premises. The report was that the complaint was dismissed, that "no nuisance was found." The house is a trap for some poor persons who have children, the last family having deserted the place on account of the death of a child from malignant diphtheria. He inquired as to the powers of the Board of

Health, whether it has the power to condemn a building and order it to be torn down as unfit for human habitation on account of its sanitary condition. Also, is there any machinery at the command of the profession through which premises affected by zymotic disease can be disinfected upon reporting them to the Board of Health?

The Chairman remarked that this subject, as it affected the public health, was an important one, and inquired of Dr. Welch, as physician to the Municipal Hospital, whether or not a public building had been erected for the purpose of disinfecting furniture by hot air.

Dr. W. M. Welch said that some years ago the Board of Health had erected a building for the purpose of disinfecting household goods and furniture, and had urged the people to remove all exposed articles to this establishment for disinfection by heat. This could be done by making application to the Board of Health. Where parties are able to pay, a charge is made for the service, but in poor cases nothing is charged. The Board of Health very frequently disinfected houses. Dr. Taylor, the Medical Inspector of the Board, would fully confirm this statement.

Dr. W. B. Atkinson said that the authorities are very slow in acting upon complaints of nuisances affecting the public health. The entire family of a fellow-member of this Society had recently suffered from an outbreak of diphtheria, which was traced to a defective drain in front of the house. A number of times this nuisance was complained of, and finally, with the greatest difficulty, and only as a personal favor, men were sent to repair it. Four children of this family suffered from malignant diphtheria, and one is now lying very ill. The County Society should take some action in this matter, and see that proper service is rendered. The Inspectors should have some special training for the work. If not medical men, they should, at least, understand the principles of hygiene.

least, understand the principles of hygiene.

Dr. J. H. Taylor, by invitation from the chair, said that the Board had no particular way of disinfecting premises. The insanitary condition of houses is generally due to imperfect trapping of the water-closet pipes. These traps become perfectly useless by "siphoning out," so that they offer no protection from the entrance of sewer-gases. In disinfecting rooms, free chlorine or sulphur fumes may be used. At the Lazaretto, chlorine is chosen for disinfecting vessels, but it is less adapted for dwellings. For drains and wells, sulphate of iron solution is generally employed.

iron solution is generally employed.

The Board of Health, in his opinion, is not empowered to destroy property by tearing down infected premises, but it might board them up in case of an epidemic.

Dr. Atkinson referred to the vast amount of excrement which is exposed and spread out upon the truck farms in the lower part of the city, or, as it is called, "the Neck." The

air is constantly loaded with the stench from this ordure, and he was surprised that the inhabitants were not every one of them sick of some one of these "filth diseases." now watching the progress of an outbreak of diphtheria of a malignant type, and thought that the attention of the Board of Health should be directed to the matter. In reply to a question from the chair, he replied that he had not reported these cases to the Board of Health, as he had been only called in consultation.

The President said that every case of diphtheria must be reported to the Board of Health,

under a penalty for neglect.

Dr. Hamilton believed that if filth was the cause of these diseases, they would be confined to the cities, whereas they are found throughout the country as well.

FRANK WOODBURY, Reporting Secretary.

### REVIEWS AND BOOK NOTICES.

ON THE SOURCE OF MUSCULAR POWER. ARGUMENTS AND CONCLUSIONS DRAWN FROM OBSERVATIONS UPON THE HUMAN SUBJECT UNDER CONDITIONS OF REST AND OF MUSCULAR EXERCISE. By Aus-TIN FLINT, M.D. New York, D. Appleton & Co, 1878. 12mo, pp. 103.

Dr. Flint's essay, which appeared in the Journal of Anatomy and Physiology for October, 1877, has now been reprinted, with various errors and inaccuracies of a typographical sort corrected. The object of the experiments here recorded has been to test the accuracy of assertions made in various quarters that the muscular system is nothing more than a sort of machine, which takes up the food and converts it into force without itself being in any way affected. Dr. Flint's experiments were made upon Weston, the well-known pedestrian, and he here gives very full details of his own investigations as well as those of others, his final conclusion being that the loss of nitrogenous material proceeds for the most part from the waste of muscular tissue, and not from the mechanical transformation of food into energy without the body. In other words, the direct source of muscular power is to be looked for in the muscular system itself. The exercise of muscular power immediately involves the destruction of a certain amount of muscular substance, of which the nitrogen excreted is a measure.

Physics of the Infectious Diseases. By C. A. LOGAN, A.M., M.D. Chicago, Jansen, McClurg & Co. 12mo, pp. 212.

After a chapter of introductory remarks upon the atmosphere as a medium of diseasetransmission, a classification of the diseases to be considered, and a discussion of the geography of disease, the author proceeds, in Part II. of this little work, to consider the physical aspect of the coast of South America. In Part III, he treats of the medical aspect of the same locality; in Part IV., of the physics of specific causation; in Part V., of the therapeutics of the infectious diseases; in Part VI., of the question of energy as related to general disorders. Under these somewhat vague and various heads Dr. Logan treats of—almost everything. Earthquakes, trade-winds, ozone, the forces of nature, oxygen and electricity, the "volcanic" (sic) pile, vital force, the flora and fauna of the past, the contagious bioplast, the infectious molecule,-nothing seems too small or too great for our author's attention. Our wonder in looking over the index was how such a small volume could possibly contain an account of all these interesting topics; but they are all there. Dr. Logan gives a "little dab at each theme as it passes, and the result is a farrago of disjointed thoughts on every conceivable subject to be found in the current scientific and medical literature of the day. Should Dr. Logan's work reach a second edition, we might be permitted to suggest the following quotation from a well-known "juvenile" by Lewis Carroll, which might serve as preface and index combined:

""The time has come,' the walrus said, 'to talk of many

things;
Of ships, and shoes, and sealing-wax, of cabbages and kings, And why the sea is boiling not, and whether pigs have wings."

A. V. H.

ON GIANT URTICARIA. By J. L. MILTON. Pamphlet, pp. 19.

ATLAS OF DISEASES OF THE SKIN. Part I. By BALMANNO SQUIRE, M.B. London, J. & A. Churchill, 1878.

The writers of these brochures possess certain faults of style in common which are, unfortunately, too frequently met with in English medical writers, and which, we venture to think, must seriously impair the value and influence of their writings. One of these is verbosity. In these days of prolific writing and publishing, when each mail brings its teeming burden of books and journals, taxing the reader's interest and attention to the utmost, it behooves one who has somewhat to tell, to "say his say" in the briefest and most pointed manner. But nothing can restrain the exuberant pen of Mr. Squire, and as he always has some new and original ideas, we must, perforce, take them in the form in which he presents them to us. Mr. Milton is less of a trial in respect to verbosity, but in his description of lesions he appears to prefer "plain English" to scientific accuracy. 'Lumps'' and "swellings," no doubt, describe the lesions of urticaria, but, like the "thingamabob" and "what-d'ye-call-'em" with which in every-day life we eke out poverty of descriptive epithet, they are liable to the imputation of vagueness. But we must hasten to add to these ungrateful criticisms the expression of our interest in the subject-matter of the pamphlets before us. Mr. Milton gives a description of several cases of urticaria different, we believe, in their appearance from any hitherto described, chiefly in the enormous size which the lesions present and in the severity and obstinacy of the disease. The treatment which cured these cases is given with some detail, and an admirable chromolithograph of the lesions presents their appearance vividly before the eye.

Mr. Squire's Atlas has as yet advanced only as far as the first part, containing an account of cases of "nævus vascularis planus" and of "psoriasis (diffusa)." The excellent chromo-lithographs are on a large scale, but showing only a small part of the surface, so as to preserve the octavo form of the volume. The picture of the nævus is particularly fine, and we should greatly like to have seen a representation of the case when cured. To have seen this we would willingly have sacrificed the picture of psoriasis as cured, this being not infrequently met with in every-day practice. But hypercriticism is not called for in the case of these plates, and we trust Mr. Squire will speedily give us further instalments of his eminently practical Atlas.

A. V. H.

THE CELL DOCTRINE. By JAMES TYSON, M.D. Second Edition. Lindsay & Blakiston, Philadelphia, 1878.

Directly after the appearance of the first edition of this book, we took occasion to praise it as a clear and concise explanation and statement of a somewhat involved and certainly very perplexing subject. So far as we saw, the medical press both in this country and in England were accordant in their expressions of its value. No wonder, then, that the author says in his preface to the new edition that he has been stimulated to renewed effort by the flattering reception of the first edition. The present volume bears the impress of this zeal. It is fuller and more complete than its predecessor, and is at the same time equally clear. We predict that it will receive, as it deserves, the persistent support of the profession.

A GUIDE TO THE PRACTICAL EXAMINATION OF THE URINE. By JAMES TYSON, M.D. Second Edition. Lindsay & Blakiston, Philadelphia, 1878.

We do not wonder at the acuteness of the attack which carried off so rapidly the first edition of this deservedly popular book. In our hands it has proved a thoroughly satisfactory guide, and we can commend it afresh to our readers, with the statement that in its new birth it is better than as it was.

SICKNESS is said to be still triumphant in the new British dominion, Cyprus.

### GLEANINGS FROM EXCHANGES.

THE VENTILATION OF BEDROOMS (The Lancet, October 19, 1878).—Although the blood-circulation is less active during sleep than when awake, it is of considerable importance to health that bedrooms should be well ventilated. The sleeper, like a bed-ridden person, is entirely dependent upon the atmosphere supplied to him for the means of carrying on the chemical purification and nutrition of his body. He must breathe the air that surrounds him, and he does this for a lengthy portion of each period of twenty-four hours, although it is probable that in a large majority of cases the atmosphere has become so deteriorated by the expiration of carbon and the emanations from the body generally, that if the senses were on the alert some change would be sought as a mere matter of preference. When a person places himself in a condition to take in all air, without being able to exercise any control over its delivery, he ought to make sure that the supply will be adequate, not merely for the maintenance of life, but for the preservation of health. If a man were to deliberately shut himself for some six or eight hours daily in a stuffy room. with closed doors and windows (the doors not being opened even to change the air during the period of incarceration), and were then to complain of headache and debility, he would be justly told that his own want of intelligent foresight was the cause of his suffering. Nevertheless, this is what the great mass of people do every night of their lives with no thought of their imprudence. There are few bedrooms in which it is perfectly safe to pass the night without something more than ordinary precautions to secure an inflow of fresh air. Every sleeping-apartment should, of course, have a fireplace with an open chimney, and in cold weather it is well if the grate contains a small fire, at least enough to create an upcast current and carry off the vitiated air of the room. In all such cases, however, when a fire is used it is necessary to see that the air drawn into the room comes from the outside of the house. By a facile mistake it is possible to place the occupant of a bedroom with a fire in a closed house in a direct current of foul air drawn from all parts of the establishment. Summer and winter, with or without the use of fires, it is well to have a free ingress for pure air. This should be the ventilator's first concern. Foul air will find an exit if pure air is admitted in sufficient quantity, but it is not certain pure air will be drawn in if the impure is drawn away. So far as sleeping-rooms are concerned, it is wise to let in air from without. The aim must be to accomplish the object without causing a great fall of temperature or a draught. The windows may be drawn down an inch or two at the top with advantage, and a fold of muslin will form a "ventilator" to take off the feeling of draught.

This, with an open fireplace, will generally suffice, and produce no unpleasant consequences, even when the weather is cold. It is, however, essential that the air outside should be pure. Little is likely to be gained by letting in fog or even a town mist.

Ovariotomy.—Dr. Keith has a paper in the British Medical Journal for October 19 upon the results of ovariotomy before and after antiseptics. Without antiseptics his results over fourteen years gave a mortality of almost 1 in 7: of the five years preceding the use of the spray, nearly 1 in 10½; of the last of these five years, 1 in 21. He has now done forty-nine operations as carefully as possible under the spray. Two of the first eight died, the rest—forty-one in number—all recovered.

After discussing the results obtained by other operators, he comes to the following

conclusions:

"What, then, have we gained by antiseptics in ovariotomy? 1. It has lessened the mortality. Take the results of the German surgeons. After the first trials, even, the mortality fell at once from fifty per cent. to twenty: thirty lives saved by the spray alone out of every hundred. When I add that my last forty-one have all recovered, enough has been said. No such successful series was ever got in the old way. Once Mr. Wells had twentyseven successful operations in succession. But look at that wonderful list of eight hundred operations. How often did it happen that there was a run of deaths, too many and occurring too often to be merely accidental,frequently four or five in succession, once seven, then ten out of twelve, etc. With antiseptics there will be no per contra, and such a run of deaths will come no more. 2. This increased safety will encourage medical men to recommend earlier operation, which certainly few of them now do. That very large tumors and bad adhesion increase the mortality there can be doubt. For the last seven years, no death happened to me in non-adherent tumors, and the deaths that occurred during that period were, with a single exception, in cases when the local difficulties prolonged the operation for two hours or more. Certainly early operation, when a cyst bursts and fluid is thrown out in a large quantity into the peritoneum, cannot be too strongly urged. 3. With antiseptic ovariotomy the drainagetube will not be nearly so often required. do not think that it can be altogether dispensed with. No one has practised drainage so much as I have, yet I know well that it sometimes cannot be used without risk. Some patients give simply serum from the irritation of the tube; in others, after a short time the tube becomes enclosed in thick lymph, and it sometimes gets choked with this. In such circumstances, there must be a risk of some folds of intestine adhering at angles when the tube is removed. I have several times seen decided inconvenience arise from this, but never any fatal obstruction. With antiseptics the tube can be removed much earlier. Drainage is certainly a great trouble both to the patient and attendant. 4. Convalescence is rendered easier. 5. Antiseptics are a great comfort and relief to the operator. Speaking for myself, the difference is enormous: ovariotomy is not the operation it was fifteen or sixteen years ago. or even two years ago. The best results in the old way were difficult to get, and no one knows, but he who has experienced it, the anxiety and weariness of spirit with which the struggle against the blood-poison was carried on in the early days of ovariotomy. It is something to think that no one will again have to suffer these experiences in the same degree, and it almost makes one envy the younger ovariotomists to whom the way in these days is made easy.

CONGENITAL EXTRUSION OF ABDOMINAL VISCERA; RETURN; RECOVERY (British Medical Fournal, October 5, 1878).-Mr. William Fear reports the following interesting case. He was summoned to attend a woman in labor with her sixth child, at full time. case was natural, and over within an hour after his arrival. The child, a large female, cried lustily in and after the birth; and something unusual at the umbilicus attracted his attention. The cord was very large through its abdominal half, and cedematous, especially so at its attachment to the umbilical ring, where it presented also a funnel-shaped condition. Through a long slit in the side of this funnel protruded all the intestines,—the small intestines, practically the whole of the colon, and the pyloric end of the stomach. The viscera were found to escape through an umbilical ring of about an inch and a half in diameter, to enter the expanded base of the cord, and then to emerge from its split side. care he spread out the extruded mass. small intestines were empty,—at first bright and pink colored, but becoming congested and blue. The large intestine contained meconium, which could be recognized and pressed along by the finger. The stomach alone was distended. The mesenteric vessels were beautifully displayed when spread out over the belly-wall, as was also the circulation along the greater curvature of the stomach. A finger passed into the empty abdominal cavity explored it easily,-the aorta behind, and the deep epigastrics in front, pulsating on the finger. With caution and difficulty, he slowly restored the entire contents from the last to the first, being embarrassed by the thrust made upon the bowels when the infant cried. Then, lifting by the cord the umbilical region into a cone, he encircled it with a skein of thread, strangulating a narrow ring of skin, and with it as much abdominal wall as possible around the umbilicus. In three hours, the child sucked vigorously; in three more, the bowels acted. No tympanites or vomiting ensued. At the end of a week, satisfactory progress had been made, and there had

been no bowel-difficulty. At the end of a fortnight the infant was still doing well; the ligature and included tissues were separating. Within six weeks, cicatrization was completed. The child is now thriving and perfectly well.

### MISCELLANY.

FATAL OCCURRENCE ON BOARD A LEITH STEAMER.—A private letter from Saigon, China, of date August 17, states that the following terrible occurrence took place in that port on board a Leith steamer early in the month. A Chinaman went down the hatchway on the cargo, and at once dropped down dead; an Englishman followed to render assistance, and he shared the same fate; a third, a fourth, and a fifth successively descended, and all—one Chinaman and four Englishmen—succumbed to the mysterious and unknown influence. It turned out that the cause of the fatality was carbonic acid gas, generated from a wet cargo of pepper and some kind of bark. The cargo, from Singapore, had been on board only three or four days.—British Medical Journal.

CARBOLIC ACID POISONING.—A case of death produced in forty-five minutes by half an ounce of commercial carbolic acid is

reported in the London Lancet for October 12, 1878. Complete collapse was caused in less

than five minutes.

DEATH IN THE TURKISH BATH .-- In the British Medical Journal of October 12 is reported a case of sudden death in a Turkish bath, affirmed to have been produced by congestion of the lungs caused by the excessive

DR. LOUIS E. GILLIARD, Librarian of the Stillé Medical Library of the University of Pennsylvania, died November 3, of malignant scarlatina, contracted from a patient. He was much esteemed by his professional friends, and was a young man of decided promise.

MR. JOSEPH LISTER has been appointed to the position of one of her majesty's surgeonsextraordinary, rendered vacant by the death

of Mr. Hilton.

## NOTES AND QUERIES.

TO THE EDITOR OF THE PHILADELPHIA MEDICAL TIMES:

To the Editor of the Philadelphia Medical Times: Str.—In your issue of the 12th inst. there is an editorial on the subject of the preliminary course of training for intending medical students, inaugurated by the Johns Hopkins University, and which the writer has apparently mistaken for a part of the curriculum of the medical school of the University. This mistake is, I fear, in part due to the short title, "Preliminary Medical Course," printed at the head of our circular; but it is difficult to see how any one could read the pamphlet through without perceiving that the proposed course is an independent one, provided for lads who leave school with a fair general education and who intend afterwards to study medicine. The very words quoted by the writer in the Philadelphia Medical Times seem to me to indicate this sufficiently. "The Johns Hopkins University will organize at the commencement of the session of 1878-79 a course of instruction preliminary to the study of medicine. This course will have the object of giving the student a liberal education, but one rather scientific than literary, and including a thorough knowl-

edge of the structure and functions of the human body in

edge of the structure and functions of the fundations of the human body in health."

This proposed course, moreover, has no exclusive relationship to the future medical school of the Johns Hopkins University, but it is offered to those who wish afterwards to study medicine in any medical school. What the requirements for medicine in any medical school. What the requirements for admission to our own medical school may be it is impossible for me or any one else at present to say; but I for one hope that no one will be admitted to it who has not had at least such a preliminary education as that afforded by the course in question, with the previous knowledge of English, Latin, and mathematics required before entering upon it. That such a student has not had a liberal education calculated to fully awaken and exercise his mental faculties, I cannot admit.

and mathematics required obsore intering upon it. In a studen that has not had a liberal education calculated to fully awaken and exercise his mental faculties, I cannot admit. Ever since our University has been opened we have received applications for admission—to its scientific departments especially—from students from all parts of the country, who either intend to take up the medical profession or who have already studied one or two sessions in a medical school; in many cases from men also who have just taken the M. D. degree. These candidates have imagined, rightly or wrongly, that the instruction which a university with endowed laboratories can give on such subjects, so essential as a foundation of scientific medicine, is likely to be more complete than that which can be obtained at most medical schools, where the professors are often men whose time is largely otherwise occupied, and in which practical laboratory instruction is, with a few exceptions (among which the University of Pennsylvania holds a prominent place), very deficient.

The Johns Hopkins University has hitherto always endeavored to do what it could for men coming to it in this way, and will, I trust, continue to do so for the future. Every year since it opened we have had some of them following its chemical and biological courses; and this year, in addition, weekly demonstrations in physiology have been provided for students from the two medical schools in Baltimore.

We have never felt, however, that the aid thus given was entirely satisfactory. Those who came from various parts to study chemistry were nearly always deficient in such knowledge of physics, and often also of elementary mathematics, as was necessary for a successful pursuit of chemistry; and those who applied for physiological instruction too often showed a deficient knowledge of the necessary preliminaries of physics and chemistry. Many, too, were ignorant of French and German, without a knowledge of which no advanced study in any of those subjects can be carried on properly

French and German, without a knowledge of which no advanced study in any of those subjects can be carried on properly.

Influenced by these facts, we have instituted a course for intending medical students, fitted, as we hope, to the needs of ordinarily intelligent lads, who leave school at about sixteen, after having acquired there a fair general education. This education we propose to supplement with, among other things, instruction in French and German (when necessary), mechanics, physics, chemistry, physiology, comparative anatomy, logic, and psychology; all fit subjects of a liberal education. The only technical subject proposed to be taught in this course is human anatomy, and this we have put in for two reasons; first, because we believe the details of human anatomy to be best studied in connection with the science of comparative anatomy; and in the second place, to lighten somewhat the labors of the medical course proper, which, without it, are amply sufficient to occupy a man for the three years, which are probably all that he will be able to give to it, —a time which, according to our critic, is amply sufficient. Probably such anatomical instruction as is contemplated in the medical school by some teaching of surgical anatomy, which would, I believe, be best given in connection with practical instruction in operative surgery on the dead body.

the medical school by some teaching of surgical anatomy, which would, I believe, be best given in connection with practical instruction in operative surgery on the dead body.

The student who has gone through our preliminary course will, on entering a medical school, be able to devote his main energies, during his stay there, to (quoting the words of our critic) the "proper medical science and art," instead of spending a great portion of his time in acquiring a hasty knowledge of such subjects as chemistry and physiology, which, although necessary to the medical man who is more than an empiric, are yet entirely independent sciences, with raisons d'être entirely apart from medicine.

A further great gain would be in the study of such subjects from a general scientific stand-point, and not, as is too commonly the case in medical schools, in the emasculated form of chemistry and physiology for medical students.

What the course adopted in our own proper medical school will be, I am, of course, quite unable to say; so far as I know, no decision whatever has as yet been arrived at on that subject. I earnestly hope, however, that, in it, that part of a medical student's time which is now commonly employed in learning those things which he ought to have learned before going near a hospital at all, will be given up to the study of pathology and pathological anatomy (that is to say, to the anatomy and physiology of the diseased body), the physiological action of drugs, the applications of chemistry and physiology to sanitary science, of these and psychology to medical jurispru-

dence, and so on. And further, that labe ratories and endowed chairs will be founded for such of these subjects as require them, so that the professors may be relieved from the cares of practice, and be able to devote their whole time and energies to the subjects they teach.

Supposing the proper medical course to extend through three years, the student at the end of it will have devoted six years altogether to preparation for his profession. From a pretty thorough knowledge of English medical schools and a somewhat less extensive one of those in Germany and in this country, I have no hesitation in saying that he will then have had a general and professional education not inferior to that required from candidates for the M.D. degree by any institution in the world.

have had a general and professional education not inferior to that required from candidates for the M.D. degree by any institution in the world.

The writer of the article in the Philadelphia Medical Times, influenced, no doubt, by a laudable prejudice in favor of his own school, suggests (although he is careful not to definitely state) that those who fulfil the requirements for entry to it will be superior in general education to those who follow our plan. But, as the acquirements demanded for entrance to the medical courses of the University of Pensylvania are less than those demanded from candidates for admission to our preliminary course, outsiders have a difficulty in seeing the grounds of his confidence.

This letter has attained such unfortunate length that I can only very briefly refer to two other points. The writer who criticises us suggests at the end of his article that men who were prepared to make sacrifices for the highest opportunities will pass by the plan at present proposed. This seems to imply that the University authorities propose to veto any studies outside those prescribed as a minimum. So far is this from being the case that suggestions are made in the circular in question that students should pass the general matriculation examination of the University, and take a B.A. degree by adding some other branch of general education to those prescribed in the latter we feel to be essential, and to give a man enough to do in three years. But if he has more time to give he will be doubly welcome; and as to the higher mathematics and Greek, on which our critic lays stress, the names of the professors in those departments are a sufficient guarantee that in them at least "the highest opportunities" will be afforded to those who are able and willing to make the necessary sacrifices.

Finally, as to the degree of Bachelor of Medicine, which, necessary sacrifices.

necessary sacrifices.

Finally, as to the degree of Bachelor of Medicine, which, we have suggested, might perhaps be given to those who have satisfactorily passed through the course preliminary to medical studies: that suggestion was merely thrown out with the view of eliciting the opinion of the medical profession on the point, and will, I have no doubt, not be carried into effect should that opinion in general be adverse to it.

should that opinion in general be adverse to it.

BALTIMORE, October 21, 1878.

[Some of the positions taken by Prof. Martin are strong, but, on the whole, we think his reply justifies our original editorial. The University of Pennsylvania, being dependent upon the receipts from classes, has to adopt a minimum medical course as essential, whilst it recommends those pecuniarily able to do more. Johns Hopkins University is differently situated, and ought to demand the maximum of all, and furnish the best possible education. This, to our thinking, it does not do. "A fair general education" is a very small basis to raise the proposed superstructure on. A higher standard of preliminary education seems essential, if the Johns Hopkins course is to be what it might be.—Ed. P. M. T.]

# IS NOT THE CODE OF ETHICS TOO LIGHTLY OBSERVED?

There is nothing more common among medical men than the violation of the code of ethics, especially the clause forbidding the insertion of cases in the daily papers.

The young physician when starting out in his vocation has

OCCASIONAL.

1511 ARCH STREET, October 21, 1878.

TO THE EDITOR OF THE PHILADELPHIA MEDICAL TIMES: MR. EDITOR,—Permit me to make some correction of the statement of your correspondent, Dr. Richardson, contained in your number of May 11, in relation to homocopathy. Dr. Richardson has evidently a very slight acquaintance with the subject which he attempts to criticise, otherwise he would know that whilst all homocopathic physicians acknowledge the supremacy of the homocopathic law of cure, nevertheless in the practical application of this law there prevails great difference of contion.

supremacy of the homeopathic law of cure, nevertheless in the practical application of this law there prevails great difference of opinion.\*

The greatest majority of homeopathic practitioners have given their testimony in favor of highly diluted remedies, in many cases, but they do not consider them as the sine qua non of homeopathic practice. They follow the views of Hahnemann, originally promulgated by him in this respect. If very sensitive persons can in some cases be influenced in health by these doses, this is by no means the general rule for the experimentation with remedies. The Vienna Homeopathic School has always used the largest doses for their provings. I speak now of the organism in a state of health. For the diseased condition, specific remedies acting directly on the affected organs, the smallest doses will be often sufficient to effect a cure, although larger doses in case of necessity are by no means excluded. Let it once for all be understood that the homeopathic practice does not merely consist in giving infinitesimal doses, but in the correct application of the specific remedy according to the principle of the homeopathic law. This similarity will in some cases be more analogous to the symptoms, in others to the pathological state of the case under consideration as far as this can correctly be ascertained.

tained.

\* Herbert Spencer, in his work on education, makes the following remarks about Pestalozzi, which are also applicable to Hahnemann. "That tendency which mankind constantly exhibit along with which any great truth has been bequeathed—their liability to prostrate their intellects before the prophet and swear by his every word—their proneness to mistake the clothing of the idea for the idea itself, renders it needful to insist strongly upon the distinction between the fundamental principles of the Pestalozzian [Hahnemannian] system and the set of expedients devised for its practice, and to suggest that while one may be considered established, the other is probably nothing but an adumbration of the normal course," etc.

Very respectfully, C. NEIDHARD.

### OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY FROM NOVEMBER 3 TO NOVEMBER 16, 1878.

TILTON, H. R., MAJOR AND SURGEON.—Leave of absence extended two months. S. O. 245, A. G. O., November 12,

omans, A. A., Captain and Assistant-Surgeon.— Granted leave of absence for one month, on Surgeon's Certificate of Disability, with permission to leave the Department. S. O. 229, Department of Texas, October 29, 1878.

KING, J. H. T., CAPTAIN AND ASSISTANT-SURGEON.—Assigned to duty at Fort McIntosh, Texas. S. O. 238, Department of Texas, November 8, 1878.

FINLEY, J. A., FIRST-LIEUTEMANT AND ASSISTANT-SUR-GBON.—Relieved from duty at Fort Elliott, Texas, and assigned to duty at Fort Wallace, Kansas. S. O. 203, Department of the Missouri, November 6, 1878.

# PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, DECEMBER 7, 1878.

### ORIGINAL LECTURES.

TWO CLINICAL LECTURES ON PRIMARY INTRA-THORACIC CARCINOMA.

BY PROF. WILLIAM PEPPER, M.D.

Delivered at the Philadelphia Hospital, October 2, and October 9, 1878.

Reported by Charles A. Oliver, M.D., late Resident Physician.

ENTLEMEN,—I shall now invite your GENTLEMEN, I shall be a steer attention to a very interesting case by reason of its obscurity. Although presenting well-marked symptoms, their explanation is rendered difficult by different possibilities. The patient is a blacksmith, aged 40 years, with the following history: perfectly healthy until within the period of the last two years, since when he has noticed that his voice has frequently been hoarse and husky, and occasionally there has been some difficulty in swallowing. About six months ago he had the symptoms of a slight pleuritic attack, recurring three months later. Edema of the lower extremities for the past two months, accompanied by severe attacks of dyspnœa. Three weeks ago, the sharp respiratory pain in the left side was renewed, being constant and severe, attended with a slight cough and expectoration.

Present symptoms.—Emaciated; slight dysphagia; voice low, thick and husky. A great deal of dyspnœa, with accelerated

respiration and rapid pulse.

Physical examination.—Inspection shows us that the left chest, in comparison with the right, appears fuller, the intercostal depressions not being so well marked; associated with an almost total absence of respiratory movement upon the same side.

Upon percussion, we find exaggeration of the right pulmonic resonance, with an absolute flatness upon the left side from clavicle to base, accompanied by marked feebleness of vocal fremitus and resonance.

Auscultation.—Upon the right side there is weak wheezing respiration with a prolongation of the expiratory murmur, and coarse sonorous râles. Upon the left side, below the third rib, there is an entire loss of respiratory murmur; above which level, anteriorly and posteriorly, can be heard distant blowing breathing.

Upon the 27th ult., chest-mensuration gave thirty-one and one-half inches as the entire circumference at the nipple-line, of which, upon the left side, from mid-sternum to the vertebral column, there were seventeen and one-quarter inches, the remaining fourteen and one-quarter inches being included in the same area upon the right side. A few days later a similar comparative mensuration showed a marked decrease. the entire circumference being thirty and one-half inches,-the right side fourteen inches, and the left side sixteen and onehalf inches. In the chest tracing at the same level, we find the right side flattened and the left side almost semicircular: the respiratory expansion almost abolished. Cardiac examination shows great dislocation of the apex-beat, it being midway between the right nipple and the right sternal

What are the possible states to produce this group of symptoms? Only two; either a solid or a liquid formation in the left chest. Solid tumors of the pleura or of the lung do not give rise to such uniform dulness as in the present instance; again, solid tumors have a long period of incipiency, whereas here the symptoms quickly appeared; besides, solid growths will not give intercostal bulging, and here we have undue intercostal prominence. Consequently, everything indicates hydrothorax pushing the lung upwards and backwards, dislocating the heart, and arching the dia-

phragm inferiorly.

Upon referring to his history, we notice that he has had some dysphonia and dysphagia for the last two years, thus antedating the above symptoms. quiring into the cause, we find that laryngoscopic examination shows no vocal cord paralysis, cedema, exudation, or foreign growth, consequently excluding laryngeal cause for the dysphonia. dyspnœa, attended by the presence upon right side of feeble, wheezing respiratory murmur, with prolonged expiration and coarse sonorous râles, with but recent evidences of cough and expectoration, all indicate obstruction of the right bronchus. If we take the dysphonia and dysphagia in conjunction with the dyspnœa, they point to the presence of a mediastinal tumor, causing pressure on the trachea, œsophagus, and right bronchus; but would a so situated tumor produce pleural effusion? It

might do so by pressing upon the azygos and hemiazygos veins, thus preventing free return of blood from the pleural

veins, with resultant hydrothorax.

Added to the above symptoms, we have one of great importance, though only to be detected by careful examination. By deeply pressing into the left supraclavicular space, we reach a mass of painless and movable glandular enlargements, some equalling the size of a hickory-nut.

We can also in cases such as this, where the cause of pleural effusion is obscure, secure aid in a diagnosis by an examination of the character of the effusion as shown by aspiration. If the liquid be turbid, highly albuminous, with a large proportion of coagulable fibrine, it is an evidence of its inflammatory origin; but if it is clear and limpid, and, upon standing, gives but a delicate veil of pseudo-fibrine, it indicates a passive or mechanical cause.

The cedema of the lower extremities we can attribute to anæmia, through absence of any organic cardiac trouble or

abnormality in his urine.

We can exclude thoracic aneurism, by the patient having a good occupation, not being syphilitic, by the absence of a murmur synchronous with cardiac movement, by pupillary equality and mobility, and by no perceptible difference in radial or brachial pulsation.

Against the idea of tuberculosis with tracheal ulceration we have the absence of hectic fever, hæmoptysis, and cough, of physical signs of disease of the right lung, and of any morbid laryngoscopical appear-

ances.

So we are forced to the diagnosis of some deep-seated thoracic tumor pressing upon the right primitive bronchus, esophagus, trachea, and azygos and hemiazygos veins.

His treatment has been complete rest, milk diet, vesication over the seat of effusion, with the following prescription four times daily:

Potass. iodid., gr. v;
Potass. acet., gr. x;
Tinct. digitalis, gtt. x;

and, if hydrothorax so increases as to cause sufficient dyspnœa to hazard his life, the advice of operative interference.

October 9.—Last night the patient died. If we could have prevailed upon him, we might have comparatively lengthened his life by performing paracentesis thoracis,

relieving the pleural cavity of its enormous amount of dropsy, and thus taking pressure from the lungs, diaphragm, and heart.

[Dr. Pepper now, for explanatory purposes, aspirated the cadaver, obtaining a slightly turbid straw-colored liquid.]

Post-mortem examination, which was conducted before the class, showed the cardiac apex to be to the right of the sternum, in the fifth right interspace. There were several fluidounces of clear

serum in the pericardial sac.

Left pleural cavity filled with a slightly turbid straw-colored serum, pressing the lung away from the costal pleura, with the exception of one strong pleuritic adherent band. The left lung was dense and compressed; its lower lobe was in a state of partial hepatization. The pleura pulmonalis was thickened and opaque, and presented several small nodules involving the outer layer of the lung.

The right lung was adherent to the chestwall by strong pleuritic adhesions, its substance being congested and ædematous, but with no traces of tubercular deposition.

There was congestion and enlargement of the liver, with incipient cirrhotic change.

Anterior to the larynx, and pressing upon it, there was an aggregation of several enlarged glands, which upon section showed the appearance of encephaloid cancer with

abundant creamy juice.

The glands both in the anterior and posterior mediastinum were involved, forming in front a mass of considerable size, which extended in front of the arch of the aorta and along the space between the left lung and the pericardial sac. Posteriorly, another elongated mass was found, imbedding both the descending aorta and the cesophagus. The glands around the right bronchus were much enlarged, so as to strongly compress the tube. The azygos and hemiazygos veins were imbedded in cancerous tissue, so that it was impossible to dissect them out.

Consequently, by taking the history and physical signs in concurrence with the autopsy, there can be no doubt that these enlargements are primary cancerous degeneration of the intrathoracic glands.

The development of the disease has been gradual; at first the glands becoming so large as to cause esophageal and tracheal pressure. During the last few months the glandular enlargements compressed the azygos veins, causing pressure and me-

chanical pleural dropsy, with some slight subacute pleurisy. The existence of bronchial pressure became evident about the same time.

Microscopic examination confirmed the diagnosis of the cancerous nature of the

glandular enlargements.

The case presents marked interest, not only on account of the obscurity of its diagnosis, but of the rarity of primary cancer of the intra-thoracic glands.

### ORIGINAL COMMUNICATIONS.

DIFFUSE SPASM OF THE FACIAL MUSCLES—TRUE CONVULSIVE TIC—CASE IN A CHILD—RECOVERY,

BY V. P. GIBNEY, A.M., M.D.,

House-Surgeon to the Hospital for the Ruptured and Crippled, New York.

THE case I am about to report presents many points of interest, and, as my ideas of the pathology of the affection are very crude, I prefer to give all the details, thus leaving speculation for my readers. Some neurologists may object to the use of the terms in the caption, but, whatever may have been the lesion, I feel assured that mimetic facial spasm truly designates the disease, so far as symptomatology is concerned

The cases I have seen reported occurred in adults; although I am free to confess that my search into the literature of the subject has not been such as I could have desired. Hypercineses exist in other localities, and, indeed, in this particular case a hypercinesis of one or more spinal nerves was a marked feature.

H. D., male, æt. 9 years, of German parentage, presented at the out-door department of the hospital, November 9, 1876. As he sat in the waiting-room, his grimaces were observed with much curiosity by the other patients. Every five or ten minutes, paroxysms would occur, the spasm beginning in the facial muscles and extending to those of back, a complete lordosis resulting. The attacks would last from twenty to thirty seconds, and then a period of perfect repose would follow. I sought carefully while making the examination for any exciting cause of the paroxysms, and could find none. On questioning the mother closely on this point, I gained no reliable information. They seemed to come on unpreceded or unaccompanied by any volun-

tary act. The spasm was notable in the corrugator supercilii and in the orbiculars of both mouth and eyes, was irregularly clonic in nature, and unattended by any pain.

The spasm, I had almost neglected to mention, affected likewise the muscles of the shoulders and hands during the paroxysm, the fingers being alternately flexed and extended in rapid succession. This, however, was not a constant sign, the face being frequently the only region involved.

He was well developed, and to every ap-

pearance in good health.

From the mother I learned that the boy had been thus affected about two years; that an attack of *rubeola* preceded the first motor signs by *about six weeks* or less; that prior to the rubeola he had ever enjoyed excellent health, and that even from this exanthem he seemed to make a good recovery; that the family history, both paternal and maternal, had been exceptionally good. So that I was utterly at a loss to find either predisposing or exciting cause without accepting the rubeola as such cause.

The progress of the case to date was that of apparent remissions and exacerbations without reference to periodicity. The beginning was not very decided, and it was the mother's impression that he had grown all along gradually worse. The paroxysms were altogether by day, and at night nothing had been observed. Whenever he contracted a cold (and this mostly affected the upper airpassages), the paroxysms were more frequent and the spasms more violent.

The fluid extract of ergot, in half-drachm

The fluid extract of ergot, in half-drachm doses three times a day, was ordered, and the patient sent to Dr. C. S. Bull for an ophthalmoscopic examination, which he kindly made, and wrote on November 15, "Boy emmetropic; vision normal; clear, healthy fundus; no hyperæmia." On this date I am informed by the mother that the paroxysms have been less severe and less frequent. The dose of

ergot is ordered doubled.

22d.—Since last visit he has contracted "a cold," and the spasms are worse. Another feature which we at first failed to observe is now very marked, viz., a spasmodic flexion of left leg once or twice during the facial paroxysm. The mother says that frequently while he is walking this phenomenon is observed, even when no facial spasm is present. Some symptoms are now observed which strongly suggest intestinal worms, and three santonin powders, gr. iii each, are ordered, the ergot in the mean while to be discontinued.

29th.—Has passed a lumbricoid, since which there has been slight improvement. Santo-

nin repeated.

December 2.—No further result from the administration of the vermifuge, though he sits in the office this morning for a full half-hour and no facial spasm occurs. The attacks are certainly less frequent. He still

Andrew Version

"hitches up the leg" at times when walking. Ergot resumed, in drachm doses three times

daily.

11th.—On more careful examination this morning, I find a moderate tenderness over cervical spine; a phimosis, i.e., a long prepuce, with slight adhesions at corona glandis about two lines to right of frænum, which is itself short; glans is free from balanitis, and corona from smegma; no extra spasm is excited by handling the glans, and adhesions are easily broken up without hemorrhage.

easily broken up without hemorrhage.
18th.—Worse for past few days, in that the paroxysms are more frequent. Blister ordered

to cervical spine.

29th.—No spinal tenderness, though condition of patient unimproved. Within past forty-eight hours the flexors of right leg have been observed in frequent clonic spasm.

Ergot 3i four times a day.

January 8, 1877.—The ergot has been rejected by the stomach; symptoms worse; during the early part of the week the spasm was in the flexors of the right leg; now it is in those of the left. One night recently he complained of severe pain in left thigh; has contracted a "fresh cold," and his grimaces have been more marked. Ergot discontinued, and Fowler's solution, gtt. v ter die, ordered,—the dose to be increased if stomach tolerates.

15th.—Has reached gtt. x, and the spasms are more severe, the paroxysms more frequent. The left arm and shoulder now participate in the movements. Dose to be increased.

19th.—Has reached gtt. xv ter in die, and puffiness of eyelids, with diarrhœa and gastric disturbance, indicates too clearly toxic effects: dose to be decreased to gtt. xii after a few

days' cessation.

26th.—Takes gtt. xii without discomfort, but does not improve. The "hitching up" of the leg is the same, and there is now tenderness on deep pressure, and to warm sponges over spinous processes of seventh and eighth dorsal vertebræ. Blister ordered again, poultices to follow.

February 2.—Decided improvement; still

taking gtt. xii of the Fowler.

oth.—Since last visit has suffered much constitutional disturbance; stomach very irritable; feverish; loss of appetite; loss of flesh, etc. Two days ago the medicine was discontinued, at which time the facial contortions were more marked than at date of last note. Pulse this morning 120; respiration normal; temperature 101°. Physical signs of chest negative. Ordered a mixture of chlorate of potassium, tincture of the chloride of iron, glycerin, and water; also brandy 3ii twice a day.

14th.—Has been complaining for a few days of pain in right ear, and last night an otorrhoea was observed. Now the auditory canal is filled with a sanguineous crust. The "hitching up" of left leg is still prominent, and the facial paroxysms are more frequent, though

not so severe. The tonic and stimulant to be continued, and the ear to be syringed out frequently with warm water.

23d.—No change, save in general health, which has improved. Discontinue the tonic and brandy; resume ergot, in *two*-drachm doses three times a day.

27th.—Decidedly worse. Spasm now imparted to flexors of thigh. Facial contortions hideous; no spinal tenderness. Discontinue ergot. Ether spray to spine this morning six minutes, with no immediate improvement. Spray to be continued daily.

March 1.—Has had three sprayings without any improvement; he fairly shakes the chair he sits upon. Santonin ordered, and spray to

be discontinued for a few days.

5th.—Passed no worms, though there is notable improvement. Spine tender this morning. Ether 3ii in spray to spine, without

immediate benefit.

7th.—Very much better; no "hitching up" of either leg, and very little facial spasm, since last note. No spinal tenderness, though the spray is repeated this morning, the same quantity of ether used. As an appetizer, quin. sulph. gr. i ter in die is ordered.

17th.—Appetite good, and quinine discon-

tinued.

20th.—There is steady though slow improvement. This morning a strong descending galvanic current to spine four minutes, instead of the ether spray.

28th.—The current has been applied every other day, with no appreciable benefit; spasms in statu quo. Ordered fluid ext. gelsemium

gtt. v ter in die.

April 17.—The gelsemium has been well borne, and the dose has been increased so that he is now taking gtt. x. The paroxysms are very infrequent and very mild; spasm manifest only in the face.

27th.—Doing well; increase dose to gtt. xii. May 7.—For past two days the convulsive tic of left face and left leg has been exaggerated, and there has been some epistaxis. Continue the gelsemium in same doses, and add the chlorate of potassium and iron mixture

as above.

June 5.—On the 19th ult. the left ankle began to swell, and soon became very painful; next day the right ankle and both knees were involved; fever was marked, as also lumbar rachialgia: in fact, an acute articular rheumatism was fairly under way. At the end of a week, convalescence was apparent. This morning there is periarthritic effusion, with tenderness at left ankle and tenderness over mid-dorsal spine. No appetite; frequent epistaxis; facial tic marked. The case has been recently under the care of the family physician, and is to remain under his care for a week or two longer.

27th.—To-day he calls, and presents an exsanguinated appearance, is weak in the limbs, while the "hitching up" of one or the other leg is still observed. The facial spasm is still the prominent sign. Now ordered the oxide of zinc, in pill, gr. ii three times a day.

July 3.—Since last note the dose has been increased, so that he is now taking gr. xii per diem, and with apparent benefit. Going into the country for two months, with directions to continue the medicine, and double the dose

if relief be not prompt.

September 7.—Returned a few days ago, much improved in health, and facial tic not so marked as when he went away. Has taken no medicine for one month, owing to difficulty in getting prescription filled. Directions as to doubling dose not followed. The zinc is now ordered in gr. iv doses three times a day.

15th.—This dose nauseates, and half the

quantity is ordered.

22d.—Even gr. ii nauseates, though "he has never been so still while sitting in school as he is now." Faint convulsive movements of the orbicularis oris are still observable, although the spasm of the leg-flexors has ceased entirely. Stop zinc, and take cod-liver oil 3ii ter in die.

October 6.—Since above date, has taken the oil with ease, and has gained flesh. The "facial tic," however, is still annoying. Ordered now the sulphate of zinc gr. ii, in pill, three

times daily.

15th.—Violent clonic spasm of orbicularis oris and orbiculares palpebrarum coming on every two or three minutes, and lasting twenty seconds at least. This was observed by the mother last night during his sleep, though not so marked then as it is at present. Double the dose of zinc, and add half-ounce of Trommer's extract of malt three times daily.

April 20, 1878.—The above medicines were continued until the spasms were controlled, and then discontinued by the mother without medical advice. She calls now with the boy to report that no spasms have appeared for a long time. None can be detected this morning; he is in an excellent condition of health, attends school regularly, and is *cured*.

October 5.—At my request, he calls to-day. The mother states that he has had no relapse since her last visit, in April, though at times there is an involuntary frown. As he sits in the office, I observe an occasional movement of the corrugator supercilii; otherwise he is perfectly well, and this causes no trouble whatever. The mother makes the voluntary statement that "he has use for his handkerchief now," an article he had little use for during his malady. On following up this suggestion, I find that there was always an unnatural dryness of the Schneiderian membrane, and that since his recovery this has disappeared.

Remarks.—As to the etiology in this particular case, I have nothing definite to affirm. The sequelæ of measles are varied enough and surprising enough to in-

clude this affection, and it occurs to me that a plausible theory might be based on the fact that measles often leaves an otitis media as a sequel, or a naso-pharyngeal catarrh occasionally. The boy certainly had one or both of these affections. Now. peripheral irritation of the nerves distributed in these localities could act reflexly on the portio dura of the seventh pair, and thus cause this direct result of nerve-irrita-That no organic disease existed we are safe in concluding, I think, from the progress of the case. For the benefit of those who may regret that no larvngoscopic or rhinoscopic examination was made. I will say now that my friend Dr. Beverly Robinson kindly made the necessary examination for me during the month of November, 1876, shortly after the patient came under my observation, and he recognized only a slight degree of chronic thickening of the mucous membranes. It was he who suggested to me the probability of intestinal worms acting reflexly in a causative relation. He did not look upon the nasopharvngeal lesion as of any importance. On his advice I ordered the santonin, and a lumbricoid was passed.

The examination of Dr. Bull eliminates any "error in refraction" from a causa-

tive relationship.

As to the pathology here I am free to confess my ignorance. Dr. Weir Mitchell has contributed largely to this subject in his many articles, and from his paper "On Functional Spasms' in the October number of the American Fournal of the Medical Sciences for 1876 much information can be obtained. It is not uncommon for the spasm, which as a rule confines itself to the facial muscles, to attack muscles of the trunk or extremities during the paroxysm. Prof. Erb, in "Ziemssen's Cyclopædia," xi. 307, makes this observation: "In many instances an extension of the convulsion is observed to take place to adjoining muscular regions. . . . At the height of the attack the muscles of the neck and shoulders, and even of the arms, are often spasmodically affected."

The prognosis of this form of spasm is notoriously unfavorable, and proof sufficient can easily be furnished. Remak, however, states that in those cases that have become chronic a perfect cure is some-

times obtained.

My therapeutics may seem to some as too heroic; yet, when Erb says that "the

treatment of mimetic facial spasm is one of the most thankless problems of medical practice." I may be excused for zeal in pushing doses to their limit. The ergot. it will be seen by the report, seemed to promise good results, yet it ultimately proved useless. Arsenic, in the form of Fowler's solution, was given until toxic effects of a grave nature were produced, and not the slightest benefit was obtained. Had the disease been chorea, or even one of the phases of chorea, certainly some relief would have followed. The ether spray and the constant current were given fair trial, too, and yet these produced no marked results. The gelsemium was borne remarkably well, and the occurrence of an attack of acute articular rheumatism while he was taking gtt. xii three times a day may have been only coincidental, yet a causative relationship might suggest itself to some: still, in view of the well-known action of gelsemium on the peripheral nerves, one cannot see how such a relationship were possible,—i.e., if we are at all disposed to regard rheumatism as of spinal origin.

A sojourn in the country did very little more than the medicines he had taken. It seems that the preparations of zinc, and especially the sulphate, accomplished more than anything else: still, the vis medicatrix naturæ may have, after all, brought about the end so happily reached. I have not reported the case to laud any special drug employed; I have simply reported it to show how even the most hopeless cases may sometimes terminate favorably, and how important it is to administer medicine with the view of reaching the physiological effects. The case furnishes good negative evidence concerning certain muchvaunted remedies. It illustrates, furthermore, how tolerant children are of certain poisonous drugs. I scarcely ever think of beginning on a child of ten years with less than five-drop doses of Fowler's solution, for instance. Much, indeed, could be said of this case, but already enough suggestions have been thrown out by certain facts connected therewith, and hence further discussion is unnecessary.

135 EAST FORTY-SECOND STREET, October 11, 1878.

The total number of patients treated in the out-door department of St. Thomas's Hospital in 1877 was 140,000. It is proposed to furnish to them, at cost, a lunch.

### NOTES OF HOSPITAL PRACTICE.

# JEFFERSON MEDICAL COLLEGE HOSPITAL.

SURGICAL CLINIC OF JOSEPH PANCOAST, M.D., EMERITUS PROFESSOR OF ANATOMY, J. M. C., FEBRUARY 9, 1878.

Reported for the Philadelphia Medical Times.

REMOVAL OF SUPERIOR MAXILLA FOR MA-LIGNANT DISEASE OF ANTRUM.

ENTLEMEN,—The first patient to J come before us to-day is Oscar M., 39 years of age, who returns to show us the result of an operation for the removal of a large cancerous growth of the left superior maxilla. You will remember that the growth began in October, 1877, with swelling which he thought was due to cold. I performed the operation on the 9th of January, and the wound was entirely healed by the 16th of January. He was in a state of extreme emaciation and pallor; but he has greatly improved since the operation. Ether was given to the patient while sitting up in a chair. Forty-four minutes were required for the operation, in which the greater part of the superior maxilla was removed by external incision. I was able, however, to save most of the hard palate, and of course the soft, leaving the velum palati in its normal position. The external incisions followed the outline of the tumor. The first began immediately under the inner canthus of the right eve. and was carried almost vertically downward, parallel with the border of the nose, and through the upper lip, into the mouth. Another incision began rather external to the line of the external canthus over the zvgoma, and ran downward, slightly curved outward, until level with the angle of the mouth, into which it was extended by a horizontal incision. This made a large flap, which was dissected from the growth. The tumor thus exposed was removed, with most of the superior maxilla, by the free use of the gouge, cutting through the bone with the strong forceps, removing also part of the malar bone and floor of the orbit and part of the hard palate. The disease apparently originated in the antrum, and was an encephaloid carcinoma. It grew downwards and outwards, which accounted for the ease with which it was removed. There was a little bleeding after the operation, so that, after securing all the vessels that could be found, it was necessary to

apply the hot iron. The wound was left open for a short time, and, when all oozing had ceased, the flap was brought down, and the edges of the wound approximated by several points of interrupted suture. It healed kindly, and was well in a week. The result is perfect, and we can now hope that the disease will not return.

#### NECROSIS OF HUMERUS—TIME OF OPERATION.

This young man shows sinuses around the elbow, evidently caused by necrosis of the humerus. As the dead bone has not yet separated, we will not attempt its removal. Never be in haste to remove necrosed bone with a chisel and mallet, as the operation will often have to be repeated. When the dead bone has separated from the living, forming a sequestrum, it is proper to liberate it by an operation, which is then likely to be successful.

#### FISTULA FOLLOWING PERINEAL ABSCESS.

This man, 42 years of age, presents a case of fistula in ano. Three weeks ago to-day I opened an abscess here, at the side of the bowel, and evacuated three gills of matter. Now he presents himself with a fistula, which admits a grooved director and enables me to divide the sinus and reduce it to an open wound. This will be packed by an oiled tent, and the wound will heal from the bottom by the granulating process.

#### GANGLION OF WRIST AND ITS TREATMENT.

This girl, 21 years old, shows us an enlargement on the posterior aspect of the wrist-joint. We call this a ganglion, I suppose, because it is not a ganglion at all. You know that the extensor tendons, running from the forearm to the fingers, pass behind the wrist-joint. Each tendon is surrounded by its proper sheath, in which there is always a little secretion to facilitate motion. In certain cases this secretion is greatly increased, probably from the result of irritation of some kind, and it forms a swelling whose contents are very much like calves'-foot jelly.

Never attempt to cut out such a tumor. It should be opened by subcutaneous incision, by passing a narrow straight knife through the skin at the distance of an inch or so away from the swelling, and then, passing it under the skin, open the cyst subcutaneously and press out the contents along this valvular incision. No air must be allowed to enter. The orifice can next be

closed with a piece of sticking-plaster and a compress applied, in which may be included a small piece of sheet lead. We divide the sheath of the tendon forming the wall of the sac, before allowing the fluid to escape. The hand shall be put on a straight splint for a few days, to keep the parts at rest. As the bandage must be firmly applied, we must be careful to remove any rings that may be on the fingers, for fear of swelling. The roller is carried from the hand over the forearm as far as the elbow. and, since it is put on rather tightly, we must watch it, for fear of producing serious disturbance of circulation: even mortification may result. If there is any pain in the part, she may wet the bandage with cold water.

#### SPINAL ABSCESS, PATHOLOGY AND DIAGNOSIS.

The man entering the room presents for our inspection a number of sinuses on the right lateral portion of the back and the corresponding thigh and groin, evidently resulting from a lumbar abscess. sometimes makes its appearance without being accompanied by much disease of the bone; but the original affection of the bone is generally tuberculous. the disease is in the posterior part of the spinal column, low down, the pus from the carious vertebra, running downwards and backwards, dissecting and undermining the muscle in its course, is very likely to point in the lumbar region. On the anterior aspect of the spine the disease may be developed, and the pus following the psoas muscle may appear on the inner side of the thigh as a psoas abscess in the position of a femoral hernia.

I have no hesitation in making a diagnosis here of disease either of the two lower bones of the lumbar vertebræ or the upper part of the sacrum. When you have matter pointing in the neighborhood of the anterior superior spine of the ilium, always suspect iliac abscess. I recollect the case of a man who fell from a house: although he did not break any bones, he was badly contused. This was followed by inflammation of the sub-peritoneal areolar tissue, ultimately causing a fluctuating tumor in this region above Poupart's ligament. laid it freely open, and obtained three pints of serous fluid after cutting through the abdominal muscles. He made a good recovery.

In a young lady coming from Cape

Island, there was a swelling in the left buttock. There was no history of injury, but it certainly contained pus and was an abscess. I did not lay this freely open, but evacuated it with the aspirator. a certain knowledge which we get by experience, of the position of various abscesses, I was led to suspect a deeper origin for this. I inquired for a strumous history: it was denied, but I found scars, cicatrices, in the neck. I therefore diagnosed it to be a case of abscess originating in the abdomen or pelvis and working its way down out of the cavity through the groove for the gluteal vessels, just as an abscess in the head may discharge from the internal ear through the meatus. The cavity of the internal ear has running into it a continuation of the arachnoid from the brain. When this becomes inflamed, the abscess ulcerates through the foramen ovale and rotundum, and discharges externally, or it may even course along the nerves to the base of the brain. there is disease of the ossicles, the discharge may flow through the Eustachian The extension of the inflammation may involve the pneumogastric nerve in its course, producing great difficulty and interference with the innervation of the heart and lungs, or it may cause spasm of the larynx and danger of suffocation. is always dangerous to allow the ear to run: chronic otorrhœa should not be neglected. I have seen meningitis set up by extension of the inflammation to the membranes of the brain along the course of the vessels. In one case the entire temporal lobe was rendered gangrenous from this cause.

Now, when there is disease in the spinal column in the vertebral bodies at the upper part, the discharge must get below the diaphragm; and it does this by going over the psoas muscle through the ligamentum arcuatum internum. It then gravitates downwards, still following this muscle as it goes towards the insertion into the femur, and points above Poupart's ligament or on the front of the thigh, or it may go backward to the loin, forming a lumbar abscess.

You remember the case of the boy who had disease of the dorsal vertebræ and had difficulty in breathing. I made this diagnosis, and told him that it would get better when the abscess worked its way through the diaphragm, either presenting in front as a psoas abscess, or, following the gluteal of age; one child. Previous to pregnancy,

vessels, appearing in the back, as I before

All abscesses, however, in the lumbar region are not of this kind: they may originate in the fat and cellular tissue of this locality; and I have seen this following typhoid fever. In a case of ordinary iliac abscess from inflammation of cæcum and vermiform appendix, when the pus forms you should always let it out. can very easily remove it with the aspirator; and I have even repeated this five or six times; but it is better to open it freely and encourage discharge. In the abscess of spinal disease the patient is liable to suffer from chills and hectic fever if the sac is laid freely open and the air allowed to enter. The pus must be discharged, however; and this may be done either by a valvular incision or by means of the aspirator.

INVERTED TOE-NAIL—PANCOAST'S OPERA-

Ed. H., 20 years of age, has an inverted toe-nail of his big toe, on the right foot. We remedy this by shaving off the projecting skin until it is on a line with the lateral border of the nail. Performing this on each side, the nail is relieved, and a good cure will result.

CHANCRE AND PARIPHIMOSIS.

Geo. McD., 25 years, presents a characteristic condition of the penis. is a comparatively large sore on the mucous membrane behind the glans, and retraction, with a dropsical condition of the prepuce, preventing it from being drawn forward. After cauterizing the surface with chloride of zinc solution, we endeavor to restore the prepuce by manipulation. Failing in this, we make a few punctures to drain off the serum, and make another attempt, which is successful. A wet dressing shall be applied, and he shall receive attention for the primary sore.

You should always relieve this condition of paraphimosis; otherwise it might lead to sloughing of the head of the penis.

#### PHILADELPHIA HOSPITAL.

SERVICE OF J. WILDS LINN, M.D.

Reported by CHAS. A. OLIVER, Resident Physician. AMNIOTIC DROPSY WITH ADHERENT PLACENTA.

B., æt. 28, single, colored, born in • Philadelphia; menses at twelve years has had slight abdominal swelling, with cedematous extremities, relieved by diuretics and active purgation. Menstrual cessation about eight months ago. Has had morning sickness and gradual abdominal enlargement. Feetal movements for last three months.

January 19.—Present symptoms,—abdomen very large, symmetrically distended from the symphysis pubis to the xyphoid cartilage; no facial puffiness; extremities not cedematous; on manual examination, usual signs of pregnancy. The urine is free from albumen and sugar, has an acid reaction, sp. gr. 1030, and contains uric acid and oxalate of lime crystals.

During January 20 she had false pains, and from noon of January 30 to the evening of February 1 she suffered from feeble pains at long intervals, the os uteri being but slightly dilated, merely admitting the

tip of the index finger.

At 2 P.M. of February 2, the pains still continuing, with but little increase of the dilatation of the os, it was decided to rupture the membranes and perform artificial dilatation.

Half an hour later, the membranes were punctured, allowing the escape of over twelve pints of amniotic fluid, and the os was dilated by means of a No. 2 Barnes' dilator. A binder was then applied, she expressing great comfort and sense of ease. Pulse 128, weak and thready. I ordered her a dessert-spoonful of whisky every hour, with tinctura digitalis, gtt. x, every second hour.

Examination at 7.30 P.M. showed the os fully dilated, the vaginal and uterine walls being almost continuous; vertex presentation, L. O. A. position; pains good,

strong and regular.

At 8 P.M. she was delivered of a small female child. It gasped and breathed, but, finding cessation of cord-pulsation and a discontinuance of the child's respiration and heart's action, I cut the cord, and with great effort succeeded in full resuscitation.

At 8.30 P.M. I commenced the delivery of the placenta, practising both the common and Credé's method, but, finding no expulsion, ceased traction, and passed my hand and arm up through the vagina and external os, and found the placenta adherent, commencing at the internal os, nearly extending over the whole right side and fundus. Slowly peeling and dissecting it off, I extracted it, and, finding it complete,

gave the woman a dessert-spoonful of vin. ergotæ; the third stage occupying one hour and forty minutes. Total duration of labor, over eighty-one hours.

At 11 P.M. the uterus was "well down," woman exceedingly feeble, pulse 116, weak and thready. Ordered the binder to be kept well tightened, and every two hours to have given—

R Ammon. carb., gr. x; Tinct. digitalis, gtt. x; Whisky, f3ij.

February 3.—Child died. Mother doing nicely. Lochia natural in amount, color, and odor. She complains of after-pains. Uterus well contracted. Pulse fuller and stronger. Treatment of ammonia, digita-

lis, and whisky continued.

February 4.—Says "she is better." Abdomen becoming tympanitic, and temperature ranging high. Ordered hot turpentine stupes every other hour during the day, and quiniæ sulph. (gr. iij t. d.) Digitalis, ammonia, and whisky every four hours.

February 5.—Abdomen less tympanitic. Two turpentine stupes during the day. Quinine continued. Digitalis, ammonia, and whisky three times daily. Lochia becoming offensive, for which I ordered a disinfectant vaginal injection t. d. She had been vomiting, for which she was given the following pill:

R Creasoti, gtt. j; Cerii oxalat., gr. ij. M., et ft. in pil. no. 1.

Continued improvement until the 22d of the month, when she was seized with a violent attack of puerperal insanity, necessitating the use of straps to prevent homicidal intent, and the exhibition of anodynes to quiet her and cause sleep. Remained in that condition for several weeks, when it became necessary to transfer her to the Insane Department.

Seven years previously she had a similar transitory attack of insanity, occurring

during her puerperal period.

936 NORTH FIFTH STREET.

A PARAGRAPH in the *Dublin Medical Press* states that the London Cremation Society are fitting up a cremating apparatus—"Gerini's Cremator"—and in a short time it will be in working order. It will probably be fixed upon a plot of ground contiguous to Woking Convict Prison, Surrey.

#### TRANSLATIONS.

THERAPEUTIC USES OF IODOFORM.—From a recent review in the Wien. Med. Presse (1878, No. 36) of an admirable work on therapeutics, by Dr. Bernatzik, we take the following notice of the various uses of iodoform, culled from the current literature of the day. Internally, iodoform may be given in pill or pastille form, or in emulsion with white of egg, or in drops, dissolved in alcohol or ether, in the dose of The pill form is preferable. gr. i ad iii. It is said to be useful in syphilitic, scrofulous, and gouty troubles, in tuberculosis of the lungs, in carcinoma, chronic rheumatism, cardialgia, nervous headache, neuralgia, sciatica, and painful ulcerative diseases. Externally, iodoform is used as a powder for sprinkling on carcinomatous diseases and syphilitic sores; in the case of the latter by means of a camel's hair brush, once a day only, the sore to be then covered with charpie and waxed paper or rubber. A similar application may be made to pointed condylomata, mucous patches, phagædenic sores, and ulcers of the cervix uteri; in the latter the iodoform may be strewn on rags wet with glycerin. Iodoform may also be applied with a brush or blown into the nostrils or pharynx in cases of syphilitic ulceration. Dissolved in ether 1:15, or in a mixture of alcohol and glycerin (2 to 3 parts of iodoform suspended in 30 parts of glycerin and 10 of alcohol), it may be used as an injection and as a local application—pledgets of lint or cotton being soaked with the mixture—to the above-mentioned sores. Dissolved in ether or alcohol (1:15-30), iodoform is recommended as a liniment in rheumatism. and as an application to rhagades, or fissures of the anus; also as an anodyne covering to abrasions of the skin in general. pended in water with the aid of albumen (albumen 1: 50-100 aq.), it may be used as a gargle or enema. Dissolved in collodion, it may be applied as in the other solutions above mentioned. In the form of ointment (1:2-15 lard), iodoform may be employed by rubbing on scrofulous, cancerous, and other chronic glandular swellings, in scaly papular and tubercular skindiseases, in hyperæsthesia of the skin, syphilitic headache, and as an application to fissures, syphilitic and painful ulcers, etc. Finally, in the form of plugs or rods, mixed with gum arabic, or in suppositories (iodoform., ol. amygd., āā 1, butyr. cacao 10-20), for the nasal passages, rectum, or vagina, iodoform may be employed in painful sores, particularly cancerous, of these parts or of the uterus.

MALIGNANT TUMORS IN INFANCY .- A number of interesting cases have been reported by Charon and Ledeganck in the Bull. de l' Acad. Roy. de Méd. de Belgique, 1878, t. xii. P. 5, p. 548 (Cbl. f. Chir., No. 38, 1878). The first was one of medullary sarcoma of the right kidney in a child of five months. A tumor had been observed for some months in the right iliac fossa, rounded, movable, slightly tender on pressure, occasionally showing pseudofluctuation. Later the growth increased in size and became nodular. Urine normal. Death at eighteen months, from marasmus. Autopsy showed the tumor the size of a man's head, preserving the kidney form. The second case was that of carcinoma of the left kidney in a child of four years, the tumor being the size of a child's head, slightly movable, somewhat hard, with a nodulated surface, reaching downwards to the crural ring, upwards to the ninth rib, back to the vertebral column, forward to several finger-breadths beyond the navel. Puncture gave exit to bloody purulent fluid. The child had had fever and diarrhœa for two months. The subsequent history was The third case was one of carunknown. cinoma of the inferior maxilla in a child two years of age. The child died after four months, of marasmus. Autopsy showed the left kidney the size of two fists and containing a soft cancerous tumor. fourth case was one of cancerous adenitis, of encephaloid character, developing in a child of five years. It first appeared in the knot of glands about the posterior tibial artery, but afterwards tumors were developed along the aorta, in the cervical re-The child died within two gion, etc. The child died within two months. This case is accompanied by pic-A fifth case was one of congenital sarcoma of the face. The newly-born child showed an egg-sized tumor in the inner angle of the left eye. Bulb intact; the right half of the nose and the cheek were involved. In ten days the tumor, which was superficially fissured, spotted, yellow, and soft, reached the forehead and lips, and began to extend over the left side of the face. Death occurred on the twentieth Section showed miliary tubercles in enormous quantity in the subcutaneous

tissues, pleura, mediastinum, and pericardium. Brain normal. The large as well as the miliary tumors showed the structure of embryonal germinal tissue. (Plates are given.) The sixth case was one of villous degeneration of the bladder in a child three vears of age. The boy had suffered with difficulty of urination for six months. The catheter struck some stony body (the encrusted papilloma). The bilateral incision was practised, and an enormous cauliflower excrescence was extracted. Two months later the growth was again quite large, extending from the wound. The child died three months after the operation.

TREATMENT OF PROLAPSE OF THE RECTUM IN INFANTS.—Dr. Settimio Basevi (Wien. Med. Presse, 1878, p. 1153) speaks of the ordinary method of treating this accident, namely, by the application of a simple bandage after reduction, as being inconvenient and inefficient: it must be removed before each defectaion. Basevi has suggested a new apparatus, which he has used successfully in a number of cases. In one, where the gut protruded four inches and had been out three or four days, it was reduced and cured: within twenty or thirty

days the trouble was quite cured.

Basevi's operation is as follows. cauterizes the mucous membrane of the intestine lightly with nitrate of silver, and replaces the gut. Subsequently enemata of tannin, alum, and ice-water are ordered, together with very strict diet, with a view to prevent enteritis. Should these measures fail and the intestine continue to come down, he uses his bandage as follows. The child is held by two nurses, with its buttocks up, over the bed, one securing the upper portion of the body, the other the slightly abducted knees somewhat up in the This position is most favorable for the reduction of the prolapsed rectum, because the child cannot bear down. reposition the surgeon stands on the right side of the bed, with the thumb of the left hand pressing the child's left buttock to the right, while the fingers bring the right buttock towards and against it. right hand several strips of plaster of some two finger-breadths are drawn from below upwards and outwards, overlapping one another, across the buttocks, from one trochanter to the other. The strips should approach the perineum as closely as possible. As a support to the plaster, a spica bandage of two or three finger-breadths is run over the lower part of the body. A gutta-percha or waxed paper covering can be used to keep the buttocks clean during defecation, and this bandage can be retained in position for a couple of weeks. If diarrhœa be present, astringent enemata may be employed; if constipation, laxative enemata; and these should be given by the physician himself, for fear of disturbing the bandage. The latter can be changed without difficulty when necessary.

ARTIFICIAL NOURISHMENT OF INFANTS. -Dr. Pletzer has recently published a small brochure on this subject, from which the following facts are extracted by the Wien. Med. Presse (p. 1165, 1878). Dr. P. believes condensed milk a very good substitute for cow's milk in the artificial feeding of infants, when the latter, the best of all substitutes for the mother's milk, cannot be obtained in purity. In order, however, to obtain cow's milk in the best possible condition for consumption in large cities. Dr. P. suggests the advantage of adopting. where practicable, "milk-institutes," such as are found in Stuttgart and Brunswick. Here the animals must be good milkers and of the best stock. Their food is to be selected carefully by competent persons, and the hygiene of the stall and of the individual animal is to be carefully looked after. Cleanliness in the minutest particulars with regard to the milk-room, the vessels, etc., must be exercised. Medical examination of the cattle should be practised frequently. If such measures were taken to insure the purity of the milk-supply, a very valuable substitute for mother's milk would be found in this pure cow's milk.

ACTION OF TINCTURE OF IODINE ON THE NECK OF THE UTERUS.—M. Laboulbène (Bull. de Thérap., August 30, 1878) says that tincture of iodine colors the healthy cervix a uniform dark brown. If slight ulceration exists, the patch is colored yellow, showing distinctly against the surrounding All granulations and vegetations are colored yellow. After the application of the actual cautery, which M. Laboulbène recommends in ulceration of the cervix, iodine gives the vellow tint until the cure is completed, and then gives the brown color. If the neck of the uterus is large, and the tincture of iodine produces islands of yellow color, a neoplasm may be apprehended with approaching ulceration in the points least colored. The diagnostic value of the iodine may easily be perceived. x.

# PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, DECEMBER 7, 1878.

#### EDITORIAL.

#### NATIONAL HEALTH ASSOCIATION.

THE late meeting of the National Health Association appears to have been the most successful and important ever held. The horrible waste of life, the terror and the loss of the late yellow fever epidemic have created, for the time being, a national popular interest in hygiene never before felt, and the national interest reacted most favorably upon the devoted band of physicians and laymen who for years have been spending labor and substance in endeavoring to save the people from their filth.

Of course vellow fever claimed the precedence. The excellent report of the Commission appointed by Dr. Woodworth, and the preparation of the subject for discussion by the preliminary committee of the Association, gave point and intensity to the proceedings which might have otherwise been lacking. The most important facts developed by the report of the Commission were, that the fever in the recent epidemic nowhere arose de novo, but was carried in clothing, goods, bedding, by persons, &c.; that disinfectants failed utterly, often doing harm rather than good; that personal prophylaxis proved a constant failure, although some physicians were found who thought the use of small doses of quinine of some preventive value; and that absolute quarantine had, without exception, afforded complete protection.

After the reading of the report, views most various were freely discussed. The belief in the contagiousness of yellow fever seems to have gained ground decidedly among those who witnessed the recent epidemic, although this contagiousness is usually thought, by those who hold to it

most strenuously, to be peculiar and its effects only witnessed under certain circumstances. The final sense of the assembly was expressed in the following series of resolutions, based upon some offered by Dr. Billings:

- 1. The yellow fever of 1878 was a specific disease, not indigenous to or originating during that year spontaneously in the United States, and its appearance in this country was due to a specific cause.
- 2. Quarantine established with such rigor and precision as to produce absolute non-intercourse will prevent the importation of the specific cause of yellow fever.

3. It is the duty of the general government to aid in the establishment of a practical and proper quarantine by all means in its power.

- 4. It is the duty of the general government to appoint a commission of experts to make a thorough investigation into the causes of yellow fever and the best methods of preventing its introduction into this country, and to make such an appropriation as will permit of securing the services of the best men and of the best means for carrying out such investigation.
- 5. It is the duty of the general government to invite foreign nations to co-operate with it in the establishment of uniform and effective international quarantine regulations.
- 6. Whatever may be the practical value of quarantine, there is no doubt of the importance and value of internal sanitary measures in the prevention or modification of epidemic yellow fever; and this Association strongly urges upon State and municipal authorities the great amount of responsibility which rests upon them on this account at times when no disease is prevalent or threatening.

A resolution of heartfelt thanks was awarded by acclamation to Mrs. Thompson for the funds contributed by her to the Yellow Fever Commission. This was right; but in doing this the Association should have given official expression to the disgrace of the nation's accepting or requiring such a gift. That a people blessed with unbounded wealth—gifted in other matters with an unequalled shrewdness—should leave the prevention of such

terference of some sort was unavoidable, of necessity and not of mere election, and the special operation performed was chosen with the view of giving each patient his best chance of recovery and life. These facts must be recollected, so that neither operator nor operation may be unfairly credited with results which should properly be charged to the patient's disease, his broken constitution and depraved circumstances of life.

The first of these specimens is a urethra and bladder, with the following history.

W. G., æt. 37, of intemperate habits, was admitted into the Philadelphia Hospital in 1870, suffering from a stricture the result of a gonorrhœa contracted four years previously. The stricture was annular in character, onequarter of an inch long, and distant from the meatus two and three-quarter inches. had for two years experienced great difficulty in micturition, and frequently introduced a flexible catheter himself. After drinking, the stricture was usually very tight. When first seen, he could not urinate, and the introduction of the catheter produced much irritation. The stricture was first divided carefully by Charrière's urethrotome from behind forward, and then slightly dilated by a Holt's dilator, and Thompson's sound No. 16 of the French scale carried into the bladder. The urine was subsequently drawn off by a No. 8 English flexible catheter. Three days after the operation, suppression of urine occurred, followed by death two days later,-that is, five days after the operation.

Post-mortem examination exhibited both kidneys large and congested, ureters normal, bladder holding six ounces of high-colored urine, vesical mucous membrane slightly congested but not softened. A urethral stricture, two and three-quarter inches from meatus, was well divided. There was no extravasation or urinary infiltration below the mucous membrane. An old false passage extended from one inch in front to two inches behind stricture, admitting a No. 10 English sound. There was great congestion of prostatic sinus, and beneath this, on the left side, a cavity half the size of an almond, filled with pus. prostatic plexus of veins was dilated, inflamed, and gorged with blood. It will be noticed that here the brunt of the destructive action had fallen upon the prostate gland and plexus

of veins, and upon the kidneys.

Preparation No. 2 was taken from a negro, W. D., æt. 35, who was admitted into the hospital June 13, 1872. He had at that time two strictures, both firm and annular, and situated respectively one inch and two and a half inches from the meatus. A whalebone filiform could with difficulty be carried through the strictures. Urination was attended with much straining and difficulty. Some irritation followed the introduction of the filiform bougies. On June 26, internal urethrotomy was performed with Charrière's urethrotome, and Thompson's sound No. 18 was carried into the bladder. In three or four days the patient could introduce No. 18 or 20 flexible catheter himself. He passed his water readily. and was apparently in good condition. On the 20th of July he lay down in the wet grass to sleep; nephritis ensued, and he died July 26, thirty days after the operation. The autopsy revealed multiple abscesses in both kidneys, with dilatation of ureters and pelves. The bladder was thickened and contracted, with a capacity of scarcely two ounces. The incisions through the strictures were completely healed, and the calibre of the urethra

was well established.

In the third preparation upon the table we have a stricture the result of a gonorrhœa contracted seventeen years before, developed in an intemperate man, J. W., 45 years of age. He was admitted into the Philadelphia Hospital on the 13th of December, 1873. stated that the symptoms of the stricture first appeared after a march, while in the army, in 1864, and that since that time he had been troubled every six months or so with retention of urine, usually brought on by drinking. He had retention when admitted, which was re-lieved by catheterization with flexible instruments of small calibre. Metallic instruments up to No. 15 or 16 French were subsequently introduced, but he gradually became weaker and more emaciated, and died on January 20. 1874. During the treatment he voided pus from his bladder in large quantities, and he occasionally suffered from retention. He was subjected to no operative interference except the gentle catheterism above referred to. At the *post-mortem* examination the walls of the bladder were found to be thickened and suppurating, and its cavity contained two and a half or three ounces of pus. In front of and surrounding the anterior portion of the prostate was an abscess the size of a walnut. On opening the urethra, a stricture an inch long was found, one and a half inches in front of the membranous urethra, and beneath the structure a false passage running backward in the direction of the triangular ligament. This false passage communicated with the urethra by three small openings before it connected with the membranous urethra through its main opening. At the time of his death the patient was greatly emaciated, weighing little over one hundred pounds.

The fourth specimen exhibited by Dr. Brinton consisted of a bladder, urethra, testicles, and kidneys, taken from a German, L. S., æt. 41, admitted to the Philadelphia Hospital, February, 1875. When received into the hospital the man was in a very terrible condition, and stated that he had decreased in weight more than fifty pounds during the last month. He was suffering from a urinary abscess of large size, the perineum, scrotum, and adjoining structures being greatly distended. The abscess, which burrowed in every direction,

had ruptured by the side of the anus, and through this adventitious opening all of his urine passed, none coming by the meatus. The man was weak and feeble, with a quick pulse. The insertion of a sound revealed a firm stricture a little more than two inches from the meatus. With some difficulty a filiform whalebone was carried through the stricture, and over it a small catheter, through which a small quantity of urine was drawn The patient's condition was so urgent that it was determined to make an immediate attempt to open up the urethra and to check the burrowing and extension of the abscess. A free incision was accordingly made in the abscess, and a large quantity of urine and pus evacuated. The finger, carried through the wound, passed into a large abscess surrounding the prostate and extending up on the right side of the bladder. The apex of the abscess could not be reached by the aid of the finger. A filiform whalebone was passed through the stricture, which was readily burst by Voillemier's dilator; Thompson's sound No. 25 was then readily introduced into the bladder. A large-sized flexible catheter was inserted into the bladder, and left in situ. The patient gradually became weaker and weaker, symptoms of uræmic poisoning appeared, and he died five days after the operation.

The following were the *post-mortem* appearances: kidneys enlarged and congested, ureters healthy, bladder contracted and walls thickened; tubercular deposits in both lungs, and also similar deposits studded over the surface of the bladder. A large urinary abscess reached nearly to the top of the bladder, involving the front of the prostate gland, and communicating by two openings with the membranous urethra. There was a large tubercular abscess in the right testicle. The effect of the divulsing instrument had been to fairly slit up the stricture and the mucous membrane for an inch and a quarter as sharply and cleanly as if they had been cut by a knife. There was no infiltration external to the mucous membrane.

5th specimen.-In January, 1877, D. S., æt. 45, was admitted into hospital suffering from two strictures, the result of two attacks of gonorrhœa, which had been contracted, one ten years and one one year previously. had great difficulty in urination, and at times suffered from complete retention. At first only the smallest catheter could be passed; but the size was gradually increased, so that in twelve or fifteen days an English No. 8 could be introduced. The strictures, which were situated, one two and a half inches and one five and a half inches from the meatus. were then gently stretched by Holt's dilator, but not divulsed. This proceeding was followed by a high degree of urethral fever, and by persistent hiccough, and the patient died eleven days after the operation. The urine was carefully examined before the operation, but not a trace of albumen could be detected.

At a post-mortem examination, the kidneys were found to be greatly enlarged, each one displacing more than one hundred and fifty ounces of water. Each kidney was filled with multilocular cysts containing a limpid fluid. Both lungs were ædematous, but not pneumonic. Heart normal. Liver normal, but pressed up against the diaphragm. The urethra appeared healthy; the stricturing points could be readily made out, but admitted No. 10 instruments. The mucous membrane was not torn, split, or congested.

The last specimen exhibited by Dr. Brinton presented the following history. C. I., a man aged 66, of intemperate habits, was admitted into the Philadelphia Hospital in the early part of 1878. He had had a gonorrhœa when young, and twenty years since, having difficulty in passing his water, he went to a dispensary, where the meatus was cut by a bistoury, and bougies passed. The meatus afterwards recontracted, and from time to time he has himself passed small flexible bougies and catheters. At times the opening of the meatus was, he said, very small indeed, and gave him much trouble in urination, and some pain when he attempted to dilate it. On the 9th of February, about two o'clock in the afternoon, Dr. Brinton, at the patient's earnest request, divided, with a Charrière's urethrotome, the stricture, which was very firm and dense, and situated about three-eighths of an inch from the meatus. The patient experienced no pain during the momentary operation. A little quinine and opium were ordered him, and he was directed to remain in his bed until the morrow. At 7 P.M. he passed his water, and was quite comfortable. At II P.M. he had a chill, which lasted fifteen or twenty minutes, but was relieved by hot coffee and external warmth. Five grains of quinine were then given him; he slept comfortably from twelve until three, and from three till six in the morning; at this time he awoke, talked with the nurse without experiencing any chill, discomfort, or unusual feeling, and five minutes afterwards turned over in his bed and died.

The *post-mortem* examination was made under the direction of Dr. Shakespeare, the pathologist of the hospital, but the most careful scrutiny failed to detect in any organ the cause of death.

After the specimens above described had been examined by the Society, Dr. Brinton briefly directed the attention of the members to the manifold causes of death in the respective cases,—to wit, inflammation of the prostatic plexus of veins, inflammation of the prostate gland, and prostatic abscess, acute nephritis, pyelitis, multiple abscess of the kidney, cystic degeneration of the kidney, extraprostatic abscess, and tubercular deposits in the bladder and testicle. He remarked that while in most cases the autopsy sufficiently

accounted for the fatal result, in the case last recorded absolutely nothing was developed which threw any light on the cause of the death. The man was operated upon, and in eighteen hours died: whether in consequence of the operation or simply as a coincidence, it is impossible to say. And here it is worthy of observation that the little incision at the meatus is one which has always been looked upon as trivial to the last degree, and one with which the idea of danger is never associated. In fact, so little is it dreaded that division of the meatus is daily required as a preliminary step to urethral exploration.

The period after operative interference at which death occurred is also a matter of interest: it varied in the cases reported from eighteen hours to thirty-seven days. In all of these cases urethral fever had been present to a greater or less degree. The presence of this condition after surgical interference with the urethra is, as is well known, most common, and in fifty-eight cases of urethral operation, viz., division, internal urethrotomy, and external perineal section, Dr. Brinton stated that he had met thirty instances of urethral fever,

eleven of which were very severe.

As far as his experience went, it would seem that urethral fever attended with astonishing impartiality upon every form of urethral operation, the severity of the attack being by no means in proportion to the gravity of the operation. As to the localities of stricture, his observations agreed in the main with those of Sir Henry Thompson. Thus, of 132 strictures present in 100 cases, the distribution was as follows:

At	mea	tus				5
At	$\frac{1}{2}$ in			meat	us	7
6.6	1	6	4.6	6.6		4
6.6	Il in	ches	6 6	6.6		4
6.6	2	44	4.6	6.6		4
**	$2\frac{1}{2}$ $3$ $3\frac{1}{2}$	4.5	6.6	6.6		4 6
6.6	3	6.6	6.6	6.6		9
6.6	$3\frac{1}{2}$	4.6	6.6	6.6		4
6.6	4	6.6	6.6	6.6		12
	41	**	6.6	6.6		6
6.6	5 5 2	**	6.6	6.6		16
4.6	53	6.6	6.6	**		24
6.6	6	4.6	6.6	6.6		23
6.6	$6\frac{1}{2}$	**	4.6	6.6		5
"	7	**	6.6	**		3

In 68 patients the strictures were single; in

29, double; in 3, triple.

The cause of the stricture in the vast majority of instances noted was a gonorrhœa, contracted at various prior periods, varying from one to thirty years, and often termi-

nating in a persistent gleet.
Dr. S. W. Gross said the specimens which have been presented by Dr. Brinton were of extreme interest, as they illustrate the fact that when we have a stricture of the urethra with other diseases of the urinary organs, we are very liable to have unfortunate results

follow any operation to relieve the stricture. In hospital practice such as we have it in the Philadelphia Hospital, where the patients come as a last resort. Dr. Gross found all operations upon the urethra to be very fatal. as the specimens exhibited very evidently show: the cause of death in these cases is seen to be various,—surgical kidneys, pyæmia, disease of the prostatic veins, etc. In private practice the results are very different. All of the operations of Dr. Brinton seem to have been of a gentle kind; the dilatation has not been excessive, and there has not been much shock. In the cases operated upon by him (Dr. Gross) he had taken the calibre of the urethra and endeavored to restore it to its normal size. Of twenty-five cases operated upon in the Philadelphia Hospital he had four deaths; in private practice, of seventy-six cases operated upon, no deaths. He had been very careful to bring his patients under the influence of quinine, after the operation to administer hypodermically morphia, and avoided exposing the patient to cold. Dr. Gross had frequently found before the operation that an examination of the urine gave no indication of disease, but immediately after the operation albumen was present. He did not consider the operation dangerous. Death had occurred in two cases in his wards from relieving the bladder of urine by a catheter. Hospital cases are exceptions: no matter what we do, they die; and we should not draw conclusions from them. His experience with the location and number of strictures in the urethra differed somewhat from that given by Sir Henry Thompson: thus, in 200 cases, representing 353 strictures, the seat of the constriction is represented by the following table, the figures denoting inches and parts of inches, commencing at the termination of the urethra at the meatus:

$\frac{1}{4}$		•				25
1/4 to 1	[ ]					55
I 1 to	21					25
21/4 to					91	24
3\(\frac{1}{2}\) to	41	•				14
$4^{\frac{1}{4}}$ to	54					45
5½ to				• 1		118
$6\frac{1}{4}$ to	74		. •			46
7½						I

Of the 200 cases, in 101 the stricture was single; in 61, double; in 30, triple; in 5, quadruple; in 2, quintuple; and in 1 there existed eleven strictures.

The exciting causes of the lesion in the 200 cases were gonorrhœa in 160, masturbation in 26, lithiasis in 4, traumatism in 4, phimosis in 2; while it could not be determined in 4.

He thought the operations were not dangerous, provided the rest of the urinary tract was healthy; divulsion not more so than internal urethrotomy: in the latter we can define the stricture and cut it only; with divulsion we do not know what we are doing.

Dr. BRINTON said, in answer to the question of a member as to his method of operating, that he usually prefaced his operation by the administration of quinine, and, if the patient seemed feeble or nervous, by a little stimulus. During the operation, which was performed under ether, every precaution was taken to guard against cold, by wrapping the limbs in blankets, and by covering the chest; afterwards quinine and opium were given internally, or morphia was used hypodermically. The amount of dilatation he employed was moderate, not usually higher than a 22, 23, or 24 Thompson's sound. Frequent instrumentation was most carefully avoided, and any introduction of a catheter or sound was deferred, if possible, until three or four days after the operation, and even then was practised with the utmost caution and gentleness. the parts were very tender, the patient was permitted to give himself a whiff of ether, so that an instrument could be inserted during the occurrence of that period of early momentary anæsthesia which has been pointed out by Dr. Packard. Dr. Brinton had never lost a case of operation for stricture in private

Dr. Gross said, with hospital patients we may very frequently have urethral fever and suppression of urine. In private practice this is not the case: he very seldom had in the latter case a chill to follow the operation. Out of 76 cases 9 were so complicated, 2 being the operation of divulsion, and 7 internal urethrotomy; 4 of the last had the operation performed under an anæsthetic. From gradual dilatation he thought there was little danger of fever. He did not believe in gradual dilatation, and thought that stricture could be

cured by internal urethrotomy.

Dr. HUNTER asked if any of the cases operated upon by internal urethrotomy had had any return of the stricture, and, if so, how long after the operation. He himself always depended upon gradual dilatation; but in all, if the bougie was not introduced at regular intervals, there was a return of the trouble. The cutting operation leaves a space, which is filled up by cicatricial tissue, which tissue is peculiar in that it contracts: it may be that when formed in the urethra it is of a different nature

formed in the urethra it is of a different nature. Dr. Gross, in reply, said it was very difficult to follow cases after operations. He had been able to trace five. In one, three years after the operation there was no return of the lesion; in the others the time since the operation was not so long, being one year to eighteen months, but as yet there had been

no return.

Dr. Shakespeare said that more than a year ago he had occasion to study under the microscope some thin sections from two pieces of stricture of the urethra. In the tissue constituting the stricture, besides the usual elements of newly-formed connective or cicatricial tissue, he had found yellow elastic fibres

in great abundance. At this same period he had examined cicatrices of incised wounds of the skin, and had failed to demonstrate in them elastic elements.

He thought that possibly the presence of elastic fibres in great numbers in strictures of the urethra might be a very constant occurrence, and might suggest a reason why a cicatrix following division of a urethral stricture has not so strong a tendency to contract as has that succeeding a wound of the skin.

Dr. H. LENOX HODGE said that we must not be led away by the attractiveness of the results of operations for stricture from the pathology of the stricture itself. One of its most marked characteristics is the tendency of the stricture to contract. This shows itself at the beginning, and continues throughout its whole history. Another point of interest in the pathology of stricture is the influence of the curvatures and variations in the diameter of the urethra in determining the locality of the stric-Again, in all cases of stricture where there is marked contraction of the canal, there is, of necessity, also some pathological condition of the bladder, ureters, and kidneys. The impediment to the flow of urine produces in time chronic cystitis, dilatation of the ureters, and congestions, inflammations, and suppurations in the kidneys. Therefore, in old and bad cases of stricture the constitution is impaired by disease of the whole urinary tract. Any operation that may be done is complicated by this depraved condition of the general health. This, of course, affects persons in both private and hospital practice. Death is, as has been stated, more frequent after the division of stricture in hospital than in private practice. This is due more to the fact that a skilful practitioner is not consulted at an early stage of the disorder, than to any peculiarity in the atmosphere of the hospital ward. Disastrous results are not all confined to hospital practice. He recalled a case in which a very distinguished surgeon had the misfortune to lose in private practice a patient whose stricture he had divided. The patient was in very favorable circumstances, and had what his surgeon considered a very slight stricture. He at first objected to any operation, because the stricture caused him very little trouble. After some hesitation, he consented to have it divided. He died in a few

Úrethral fever is something more than surgical fever, as his friend Dr. Gross had termed it. Surgical fever occurs even in the most healthy persons on account of some injury or surgical operation. It generally runs a very mild course, and is marked only by a slight rise in the pulse and temperature; whereas urethral fever is usually ushered in by marked chills and runs a rapid and dangerous course. The constitution of the patient is already impaired by disease of the urethra, bladder, and

kidneys.

In studying the cause of so sudden a death as one of those related by his friend Dr. Brinton, we must not forget the possibility that it may be due to something else than the ordinary pathology of the disorder. For instance, some patients bear morphia very badly, and at times its exhibition is followed by very

alarming symptoms.

As regards the influence exerted upon the pathology of stricture by the treatment of gradual dilatation, his own experience had been very favorable. It is the method of treatment which he preferred. All of the cases which he had been able to follow had been cured. A very marked case occurred to him nineteen or twenty years ago. He had charge of a very bad case of stricture, with numerous urinary fistulæ in the scrotum and perineum. The case was treated by gradual dilatation, and resulted in a perfect cure. He had the opportunity of seeing the patient recently, who has not used a catheter or bougie for many years, can pass a large stream, and has no difficulty whatever.

# GLEANINGS FROM EXCHANGES.

Dr. Hughlings-Jackson on the Cerebel-LUM.—The generally accepted doctrine as to the chief function of the cerebellum is that it coordinates the impressions and movements of locomotion. This is equivalent to saying that it represents the impressions and movements of locomotion, or, if we only assert that it is the chief centre for locomotor co-ordination, the most special and complex of them. For there is no faculty of co-ordination over and above a representation of impressions and movements themselves. What, then, are the impressions and movements of locomotion which are tacitly asserted to be represented in the cerebellum by those who hold the opinion that it is the co-ordinating centre for locomotion? We will, however, speak only of the move-ments. In the strictest sense we should probably take in all the movements of the body, or, more correctly speaking, movements of all parts of the body. If this be so, those who say that the cerebellum is the organ for co-ordinating the movements of locomotion say that it represents movements of all parts of the body. Dr. Hughlings-Jackson believes that the cerebrum also represents movements of all parts of the body. There is no reason why the very same muscles should not be represented in different kinds of movement in each

Artificially limiting ourselves to the most conspicuous of the movements of locomotion, we see that they are of the spine, legs, and arms. It is to be borne in mind that the muscles of the spine are necessarily in action in locomotion, and in action first. No one can began to walk until his spine be braced

up, and during walking the trunk goes through very complex motion. Marey says. "These movements are very complex; they are effected at the same time in every direction, and give to the trajectory which a point of the body describes in space, some very complicated sinuosities." And if we say that these movements of the trunk when walking is begun are in one sense produced by the action of the leg, yet without appropriate stiffenings of the spinal muscles the body would fall over in the direction the legs impelled it in. In correspondence we find that the spinal movements are those first to suffer in destroying disease of the cerebellum. The kind of disorderly walking in an early stage of disease of the cerebellum is not paraplegic; it is not the stagger of locomotor ataxy; it is a reel, a drunken-like walk. In an early stage the movements of the legs, tested when the patient is sitting, are powerful. The legs at that stage, it is true, act very erratically when the patient walks, but this is because, the spinal movements being weak, the trunk tends to fall this way and that; the erratic movements of the legs are really "intelligent" attempts to "run after" and prop up the trunk in its various inclinings, which the now weak spinal movements cannot moderate. Similarly in some cases of unsteady movements of the arm, the chief fault is in the muscles which should fix the scapula.

Just as there is no faculty of co-ordination, nor any co-ordination, except in the sense of representation of movements in definite relation one to another with corresponding impressions, so there is no loss nor disorder of co-ordination except in the sense of a loss of function or over-function, more or less, of the representing nervous arrangements. We here speak of loss of function - destruction-of some of them. In an early stage of cerebellar disease there is veritable paralysis or paresis of the spinal movements; the disorderly movements of the legs are secondary effects of that paralysis or paresis. If so, the essential fault is like that in hemiplegia or in any other paralysis: it is a sign of loss of function of some nervous arrangements for some movements. We must not think of hemiplegia simply as a loss of power of muscles, but as a loss of a number of movements of the face, arm, or leg. Similarly, in the cerebellar reel there is loss of a number of movements of the spinal column. If so, we must not class the cerebellar reel with such disorders of coordination as chorea; for in the latter there is over-function of the nervous arrangements,morbidly increased discharges. Looked at superficially, they are different: the reel only exists when the patient is trying to walk; the choreal movements occur at any time. true analogue of the reel is such a symptom as hemiplegia, not chorea, it being understood that we do not compare with the hemiplegia the erratic movements of the legs, but the loss of those movements which render these movements necessary,—render necessary wider and more sudden excursions of the legs.

Probably also different spinal movements suffer, or suffer more, in different cases, according to the exact seat of the cerebellar lesion.

If we observe very rapid locomotion, we see how wide the muscular action is: the trunk is bent forward; respiration is suspended for short periods; the arms which are evidently in action in walking-and, as Duchenne and Marey have insisted, not merely in pendulum action—are in running in very strong action; they are in wide action, the activity extending even to the fingers (professional runners carry cork in their hands to prevent their nails hurting their palms); the muscles of the face and jaws are in action; circulation must necessarily be affected. To say, then, that the cerebellum represents the muscles of locomotion is equivalent to saying that it represents movements of all, or nearly all, parts of the body. And, if so, tetanus, however wide the spasm, may plausibly be put down to discharge of some part of this organ, as a discharge of the most special and complex of the nervous arrangements for locomotion. The order of spreading of the spasm of muscles in tetanus follows, if not closely yet generally, the order in which the muscles get into increasing activity in locomotion, from walking to swift running. Thus, then, the cerebellar reel pairs off with cerebral hemiplegia, and tetanus (cerebellar convulsions?) with the unilaterally beginning epileptiform seizure (cerebellar convulsion).

In some cases of hemiplegia there is rigidity of the paralyzed muscles; there is a double condition, a negative and a positive one; there are together paralysis and spasm. The hypothesis suggested is that the paralysis is owing to the cerebral lesion, and the spasm to unantagonized cerebellar influence; there is cerebral paralysis of the same muscles which are subjects of cerebellar spasm.

Again, in cases of cerebellar lesion there ensues after a time rigidity of the parts paralyzed or partially paralyzed by that lesion. For, besides the tetanus-like paraxysm of which we have spoken, a permanent rigidity of the muscles of the spine, arms, and legs may come on at a late stage. In a severe case the head is thrown back, the legs are stiffened in extension, and the feet are extended and slightly incurved; the elbows are kept near the side, the forearm is flexed on the upper arm, and the fingers are clenched. —Medical Times and Gazette.

THE TREATMENT OF PREGNANCY COMPLICATED WITH CANCEROUS DISEASE OF THE GENITAL CANAL (*The Lancet*, October 19, 1878).—At a recent meeting of the Obstetrical Society of London, Dr. Herman read a paper on the above subject, and narrated two cases which had come under his own care. In one,

labor was obstructed by a cancerous tumor of the rectum. The patient was delivered by cephalotripsy, and died from peritonitis. In the other, the cervix uteri was fixed by cancerous disease; abortion was induced at the end of the fifth month. The patient lived seven months afterwards, marked relief to the symptoms having followed the abortion. An analysis of 180 recorded cases, collected from different sources, and classified, was then given. From them he drew the following conclusions. I. That whatever influence cancer of the uterus may have upon conception is adverse to its occurrence. This was inferred from the small number of cases in which the patient was suffering from cancer at the time conception took place, as compared with the frequency of the disease. 2. That cancer of the uterus tends to produce the intra-uterine death and premature expulsion of the fœtus. This conclusion followed from the large proportion of premature births, and of not only stillborn but decomposing children. 3. That the growth of cancer of the uterus is, as a rule, accelerated during pregnancy. This was supported by *a priori* arguments from general pathology, by the analogy of the breast, and by the improvement which often followed the termination of the pregnancy. 4. That with cancerous disease affecting the whole circumference of the os uteri labor may be quick and easy, and the patient may recover well, and live for months afterwards. 5. That when delivery under such conditions is accomplished by natural efforts, expansion of the cervix usually takes place by fissuring. 6. That this fissuring does not usually augment the risk to the mother. 7. That imitation of this natural process, by making incisions, neither increases the danger at the time nor accelerates the progress of the disease subsequently, and that it often greatly facilitates delivery. 8. That the cases in which the cancer forms a tumor of great size or hardness are the ones in which delivery by natural efforts will not take place. o. That where the above characters are absent, no definite criteria can be drawn from the local conditions by which to foretell the behavior of the os uteri during labor. 10. That where delivery of a living child per vias naturales is impossible, such limited experience as we have shows that there is but little difference, as to risk to the mother, between craniotomy and Cæsarean section. 11. That a part of the cervix uteri may with safety be removed either during pregnancy or during labor. These last eight conclusions were supported by the evidence of recorded cases. author then considered from these data the practice to be followed. He assumed that the life of the mother was the first consideration, and that the production of abortion was justified if maternal life could be saved or pro-longed thereby. The following were the rules of practice which he thought indicated. That where it is possible to remove the disease, either during pregnancy or at the time of labor, it ought to be done. 2. That where this cannot be done, the safety of the mother is best consulted by bringing the pregnancy to an end as soon as possible. 3. That when labor has actually come on, expansion of the os uteri should be aided by making numerous small incisions in its circumference. 4. That dilatation of the cervix uteri being in progress, if uterine action should be deficient, and it should become necessary to accelerate labor, the use of the forceps is, as a rule, better than turning. 5. That when dilatation of the cervix cannot take place, even after incisions have been made, either from rigidity or magnitude of the tumor, Cæsarean section should be performed.

EXPERIMENTAL RESEARCHES ON INFECTION AND ON IMMUNITY FROM VACCINE (*The Lancet*, October 26, 1878).—A memoir of M. Maurice Raynaud, reported in the *Progrès Médical*,

contains the following conclusions:

First, as regards the vaccine pustule. The evolution of this vesicle is not requisite to secure immunity. Immunity is effected even when, after sub-epidermic inoculation, the development of the vesicle is prevented by artificial means.

Secondly, in regard to the nervous system, his experiments show that it is quite extraneous or foreign to the completion of the phenomena of vaccine inoculation. For the antecedent section of the nerves distributed to the region inoculated does not interfere with the occurrence of all the symptoms naturally following infection. Nor, indeed, does such section perceptibly modify the march of the vaccine vesicle.

Thirdly, in regard to the blood, he found that the sub-epidermic inoculation of an animal suffering from vaccine never produces vacci-This proceeding is not, therefore, susceptible of any practical application. transfusion even of large quantities of vaccinal blood is not followed by any appreciable effect, since the animal still remains liable to be infected with the vaccine virus. It is possible, however, he thinks, that under certain circumstances the transfusion of a considerable quantity of vaccinal blood into an animal may render it incapable of contracting vaccinia without inducing any other change in it. But, even then, the immunity thus acquired could not be propagated in the same way to a third individual. It hence appears to be highly improbable that the blood is the means by which the vaccine virus generalizes itself through the economy at large.

Fourthly, in regard to the lymphatics, he finds that the sub-epidermic inoculation of lymph taken from a vaccinated region, or taken beyond the nearest ganglion, gives the same negative results as the sub-epidermic inoculation of vaccinal blood. On the other hand, by injecting some grammes of this lymph into the blood of a horse, M. Raynaud has suc-

ceeded in inducing the appearance of "horsepox." This lymph, then, appears to possess some virulence if employed in somewhat

strong doses.

Fifthly, in regard to the lymphatic ganglia, he finds that after normal vaccination the ganglion nearest to the spot vaccinated is invariably congested, although hitherto this fact has been overlooked or misunderstood. The congestion quite justifies the application of the term vaccinal bubo applied to it. The bubo is indolent, and presents no inflammatory reaction. Nevertheless, inoculation with the juice of this ganglion, whenever it may be performed, does not produce cow-pox. It is possible, then, to recognize traces of virulence in the lymphatic system between the place of inoculation and the nearest ganglion, but be-yond this point no traces are discoverable. This circumstance seems to suggest that an elaborating function may be attributed to the lymphatic ganglia, expressing itself in the disappearance of virulence and the supervention of immunity, two facts which are simultaneous and correlative.

#### MISCELLANY.

On Saturday the 9th of November a committee appointed by the Maryland Academy of Sciences, and approved by the Academy of Medicine and the Baltimore Medical Association, consisting of Drs. J. R. Uhler, C. C. Bombaugh, and C. L. Oudesluys, waited on President Hayes with the following memorial:

"To the President:

"The undersigned, a committee appointed by the Maryland Academy of Sciences, most respectfully request you to transmit to Congress a message asking an appropriation and authority to appoint a permanent scientific and medical commission, to study and report upon the nature, causes, treatment, and prevention of yellow fever and allied epidemic diseases; said commission to consist of twenty or more members, chosen from the ablest chemists, physicists, microscopists, biologists, naturalists, and physicians in the country, with power to select, from their own number and others, workers, in order that the disease may be systematically examined from different points of view, both by acclimated members on the spot and others in the various laboratories of our country.

> "J. R. Uhler, M.D., Charles L. Oudesluys, Rev. John M. Holmes, George W. Davidson, P. G. Sauerwein, C. C. Bombaugh, M.D."

During the conversation that ensued, the following important points were made: I. That the investigation should be commenced

at once in the interval before another epidemic, in order that the healthy conditions of the air, water, food, plant, and animal life may be accurately ascertained. 2. That the investigations should be made by a large number of competent persons, the acclimated ones working on the spot, the others in the various laboratories of our country. 3. It is particularly important that said work should be systematic, in contradistinction to the random efforts hitherto employed. 4. A number of names of men possessing a national reputation from the various large universities of the country, consisting of a naturalist, a cryptogamic botanist, biologists, chemists, physicists, physiologists, microscopists, and experimental physicians, were suggested. Both the memorial and suggestions were favorably received, and the President thought it would be well to give the matter wide publicity, in order that the profession and others might bring it to the attention of Congressmen and thus in-sure the passage of the bill.

FILTERING WATER.—Dr. Nolter, Assistant Professor of Hygiene at Netley Army School, has arrived at the following results as the conclusion of an elaborate series of experiments:

1. Filtration through sand is simply mechanical for the most part, and not to be de-

pended on as a purifier.

2. Water may be purified by animal charcoal to a large extent; that its action is extremely rapid on decomposed organic matter; that fresh organic matter passes through unchanged; and that water should on no account be stored after filtration, as this matter subsequently decomposes, giving rise to low organisms. It is advisable not to leave the water in contact with the animal charcoal for a lengthened period, as it again takes up impurities from the medium.

3. That spongy iron is undoubtedly the best filtering material. Its action is not so rapid as charcoal, but there is no danger in prolonging the contact with the water. As far as my experiments go, it is the only safe filtering medium we have at present. It appears to act on all organic matter, whether fresh or decomposed, whereas charcoal acts more as a dialyzer when colloidal substances are fresh and in a state of extreme dilution, and are certain to decompose after filtration.

One feature of filtering through charcoal must not be lost sight of,—that charcoal becomes exhausted of its oxygen, and that foul gases held in solution by the water may replace it. Its action is limited, and it requires

constant attention.

# NOTES AND QUERIES.

43 WEST 54TH STREET, NEW YORK, Nov. 25, 1878. TO THE EDITOR OF THE PHILADELPHIA MEDICAL TIMES:

SIR,-I think the editorial in the last number of the Medical Times is unjust to me in several particulars. As the matter between Drs. Grissom and Gray and myself is now before a court of law, I have no intention of entering into any defence in this place, or of doing more than expressing my regret that you should have been led into such a one-sided expression of opinion.

sion of opinion.

As you have not, apparently, seen my replies to Dr. Grissom, I send you copies by this mail, and I think you will find by perusing them that I had ample ground for my strictures on that individual and my action against Dr. Gray.

I am, very respectfully, your obt. servt.,

WILLIAM A. HAMMOND.

[Before writing the editorial aluded to, we read carefully the replies of Dr. Hammond, and the more we read the more we wondered that a person possessed of any sense or gentlemanly instincts should write such "stuft." If Dr. Hammond be innocent, he has suffered more injustice at the hand of Dr. Wm. A. Hammond than from any other living man, Drs. Gray and Grissom not excepted.—Ed. P. M. T.]

TO THE EDITOR OF THE PHILADELPHIA MEDICAL TIMES:

To the Editor of the Philadblphia Medical Times: In your notice of the controversy between Drs. Grissom and Hammond, in the number for November 9, is one statement not exactly correct. After Dr. Grissom's paper was read to the Association of Superintendents, a resolution was offered protesting against the character of the paper and invoking upon it the condemnation of the Association. Three members supported it, for the reason, as they said, that that was neither the time nor the place for assailing the professional or moral character of any one. It is not to be interred, however, that the rejection of the resolution was equivalent to the endorsement of the paper by the Association. Several of the members who voted in the negative expressed the prevailing sentiment in saying, as the ground of their action, that they did not consider the Association responsible for the sayings of its individual members. To pass a vote of censure of Dr. Grissom's paper, whatever they might think of it, would be to abandon a principle which had always been maintained by the Association.

TO THE EDITOR OF THE PHILADELPHIA MEDICAL TIMES:

To the Editor,—I am well aware that you cannot open your columns to the discussion of homeopathy, but, as you nave admitted Dr. Neidhard's letter, will you allow me to offer a brief comment on a passage in it, and a suggestion that, to my mind, is conclusive of the whole subject?

Dr. N. says, "Let it, once for all, be understood that the homeopathic practice does not merely consist in giving infinitesimal doses,"—if so, the name is a marvel of absurd inaccuracy),—"but in the correct application of the specific remedy, according to the principle of the homeopathic practice is the practice of homeopathy. This will probably be admitted by every one; but the doctor goes on to say, "This similarity will in some cases be more analogous to the symptoms, in others to the pathological state of the case under consideration, as far as this can correctly be ascertained." Would it not be deducible from this that the symptoms do not always tell a true tale as to the pathological state, and hence further, that the study of scientific pathology, the basis of all sound practice, would be better than that of mere symptoms and doses?

Now for my suggestion. It is simply that any one who can symptoms and doses?

Now for my suggestion. It is simply that any one who can, out of the vast body of observers interested, should report a case in which belladonna has produced any but the most superficial and non-essential symptoms of scarlatina; or one in which opium has produced diarrhea; or one in which quinne, in large or small doses, has produced the phenomena of intermittent fever; or one in which mercury has given rise to those of constitutional syphilis, or in which iodide of potassium has had this effect; or in which bromide of potassium has induced epileptiform seizures. Or, more generally, any disease or epidemic in which, subjected to fair tests, homeopathic practice has been shown to be more successful than that of regular physicians.

Homeopaths will be delighted, I am sure, to produce an ample array of such cases, fully attested,—if they exist; and, on the other hand, it is certain that physicians of the old school will be unable to suppress them,—on the same condition. case in which belladonna has produced any but the most super-

tion.

If they do not exist, it seems to me that we can scarcely be accused of prejudice if we decline to award homoeopathy any scientific status. Now that homoeopaths are seeking to breek down the existing barriers between them and the regular profession, it is time for them to show what claims, it any, they have upon the consideration of those whom they have so long and so systematically accused of prejudice, old-fogyism, and I know not what besides.

Yours, respectfully,

FAIR PLAY.

# PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, DECEMBER 21, 1878.

#### ORIGINAL COMMUNICATIONS.

HARVEY AND THE TRANSIT OF THE BLOOD FROM THE ARTE-RIES TO THE VEINS "PER PO-ROSITATES."

A paper read before the College of Physicians of Phila-delphia, Nov. 6, 1878, in reply to Dr. Da Costa's state-ment that Harvey did not understand the capillary

BY W. S. FORBES, M.D.,

Senior Surgeon to the Episcopal Hospital, Fellow of the College of Physicians of Philadelphia, etc.

IN a paper I had the privilege of reading before the college on the occasion of the tercentennial anniversary of Harvey's birth. April, 1878 (published in the American Fournal of the Medical Sciences for July, 1878), I stated that Harvey in using the word "porositates" more clearly expressed the idea of the way by means of which the transit of the blood is made from the arteries to the veins, than is now expressed by the word capillaries, -porositates\* meaning walled vessels, continuous with the arteries on the one hand and the veins on the other, yet distinct from both, and relating to the exact function of these vessels, that of conveying the blood continuously from the arteries to the veins, the word "capillaries" referring only to their hairlike appearance.

Dr. Da Costa, in a lecture lately delivered before the class of the Jefferson Medical College, and now published, draws attention to my paper, and states that Harvey used the term "porositas" in the sense of the modern term porosity.

Dr. Da Costa's remarks have an amiable complexion; but he says, "I am reluctantly forced to believe that the generallyheld opinion of Harvey not having understood the capillary circulation is correct." He bases this opinion upon reasons which I shall proceed to examine seriatim. I presume we all have the desire to know what is true and what is not true in this matter, for the discovery of truth is a common good.

Dr. Da Costa states that the word "porositas is not of good, or of moderately good, Latinity;" that "it is scarcely to be called a Latin word."

Now, it is not my purpose to discuss Harvey's Latin. It is enough that he makes use of the word "porositates," an abstract noun in the plural number. It is for us to observe what he means by it, as it is manifest he attaches especial importance to it.

Dr. Da Costa says, "The Greek word  $\pi \delta \rho o \varsigma$  has the meaning of pore, as we understand it; it is translated by some of the best scholars as pore, or porosity in the modern sense. For instance, in Cousin's translation of Plato's Meno, p. 156, we find 'et qu'elles ont des pores (πόρους) dans lesquels et au travers desquels passent ces écoulements . . . et que certains écoulements sont proportionnés à certains pores.''' Now, does Plato mean porosity here? Let us produce the original text and examine it. Here is Stallbaum's edition of Plato's Meno:

In the sentence just preceding the one in which the word in question  $(\pi \delta \rho o \upsilon z)$  occurs, Socrates asks Meno, "Do not Gorgias and Empedocles say that there are certain effluences (ἀπορροαι) of existence?" Meno says, "Certainly." Socrates says, "And passages  $(\pi \delta \rho o \nu \varsigma)$  into which and through which the effluences pass?" Meno, "Exactly." Socrates adds, "And some of the effluences fit into the passages, and some of them are too small or too large?" Meno answers, "True." Surely there is nothing like porosity here. It is important to observe what Gorgias and Empedocles mean, for upon the understanding of this hangs the sense of this matter. Empedocles in his philosophy had declared that outward things made themselves perceptible to the mind by means of effluences passing through the special senses specially arranged for their reception.

He is alluding to the five special senses. And what he says is plain; otherwise we should have the eyes feeling and the hands

seeing.

Gorgias says, just as appropriately, that "an artist in constructing a house disposes all things in order; each part is compelled to harmonize and accord with every other part until a systematic whole is constructed." He emphatically adds, "And as with a house, so with the human body. If the parts in the house, as well as those

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<sup>\*</sup> In my former paper, and in this one, I have rendered Harvey's word "porositates" into English as ferry vessels; the word being derived from the Greek  $\pi \acute{o}pos$ , a ferry, a passage. I use the word ferry (Saxon, faran, "to pass;" feran, "a ferry") in its original sense, that in which Spenser uses it, "Him to ferry over that deep flood;" and in Shakspeare, "I pass the melancholy flood, with that grim ferryman, which poets write of, unto the kingdom of perpetual night" (Richard III.). In this sense the word does not comprehend a return.

in the body, are not in accord, there is evil." The text referred to by Dr. Da Costa in Plato's Meno is as follows:

ΣΩ.—Καὶ πόρους, εἰς ούς καὶ δι' των αί

απορόσαι πορεύονται;

ΜΕΝ.--Πάνυ γε.

ΣΩ.—Καὶ τῶν ἀπορροῶν τὰς μὲν ἀρμόττειν ἐνίοις τῶν πόρων, τὰς δὲ ἐλάττους ἢ μείξους εἶναι;

ΜΕΝ.—"Εστι ταῦτα.\*

Can this mean porosity in its modern

sense, or in any sense?

Let us suppose for a moment that Plato did mean a condition of porosity: should we not have the effluences going where they do not fit? (proportionnes, as Cousin has it.) In other words, the eyes would be endeavoring to feel, and the hands to see. The parts would not be in accord; there would be evil, as Gorgias remarks. The fæces would be liable to pass out of the urethra, and the semen to be projected from the anus. Would Dr. Da Costa have this to be the philosophy of the sublime Plato? Yet the term "porosity" would mean this and nothing but this.

I am aware that metaphysical conceptions easily pass into one another, and the simple notions of antiquity, which we can realize only by an effort, imperceptibly blend with the more familiar theories of modern philosophy. In the study of Plato and of other great artists, however, we should have an eye for proportion.

When a modern theory is running away with us, it may be well to recall the indications of the text: χαὶ τῶν ἀποδροῶν τὰς

μέν δρμόττειν ένίοις τῶν πόρων.

We are told by Dr. Da Costa that Harvey used the word porositates indiscriminately with poros (second letter to Riolanus), as thus, "qualiter sanguis pertransire per omnes partium poros possit," and that the same idea of the blood in the tissues is expressed in the sentence, "sanguis in porositatibus partium" (first letter to Riolanus); also that in the seventh chapter of Harvey's text, Harvey uses the term "as applied to the loose structure of the lungs, comparing it to a sponge."

In regard to the above sentence beginning "qualiter," let us translate it: "Lest it should appear difficult for the blood to go through the passages of all the parts, and to flow in every direction, I will add an illustration. That which happens in the

arm bound with a fillet" (which Harvey has just told us of in an experiment) "takes place in one strangulated and suspended by a noose. All the parts above the cord. that is, the face, eyes, lips, and tongue, and all the superior parts of the head, are stuffed with a bloody redness and turgescence, like the liver. But if the noose be relaxed, in whatever position you place the dead body, you will see before many hours the bloody aspect of the countenance and head to pass away, and all the parts below, and especially the skin, colored through the passages of the skin and flesh and other parts with a black putrid gore. But if this happens in the dead body, stiff with the chill of death, the blood dead, coagulated (cruor mortuus, coagulatus), and the openings choked and blocked up (viisque stipatis et compressis); how much more easily, through the parts in the living body, will the transit occur, the blood alive and active (sanguis vivus et spirituosus), and penetrating the open ferry vessels (apertis porositatibus penetrativus)."

By "omnes partium poros" found in the beginning of the above sentence, Harvey means all passages, and far from any idea of porosity is porositatibus here used. For observe, in the immediate context, the sentence following, and the two sentences must be taken collectively in order to grasp the meaning of Harvey, the striking difference Harvey makes between blood in its fitting, natural passages, sanguis vivus et spirituosus, as applied to apertis porositatibus penetrativus, and blood dead, coagulated, cruor mortuus, coagulatus, as applied to viis stipatis et compressis. These

are his words.

In short, with Harvey, sanguis is blood circulating and vivifying and passing into and through "apertis porositatibus;" while cruor is blood extravasated, coagulated, and out of its natural passages, and, as he says, not able to pass "viis stipatis et compressis." Virgil says, cruorem ore ejectare, to spit blood. Pliny says, oculi suffusi cruore, blood-shot eyes. In all this the application of the saying of Plato,  $\pi \delta \rho o v \in \Delta n \delta \rho \delta \rho o v = \lambda \delta n \delta \rho \delta \rho o v = \lambda \delta n \delta \rho \delta \rho o v = \lambda \delta n \delta \delta \rho \delta n \delta n \delta \delta n \delta \delta n \delta \delta n \delta n \delta \delta n \delta n \delta n \delta \delta n \delta$ 

In regard to the sentence in the first part of the first letter to Riolanus, "sanguis in porositatibus partium," which is quoted by Dr. Da Costa as conveying the same idea of blood in the tissues as expressed in the sentence "qualiter" just discussed, I have to add that there is a dif-

<sup>\*</sup> Stallbaum: Plato's Meno, edition 1836, page 47.

ference in the text in the earlier and later editions of Harvey's works. In all the earlier editions that I have seen, and which were issued during Harvey's life, and in the edition of 1661, published at Rotterdam, we find that the text is "e porositatibus partium." The Royal College of Physicians' edition of 1766 alone, as far as I can observe, has "in porositatibus partium." The translation of the sentence is, "But, further, that the blood is returned to the heart from the ferry vessels is manifest from what we observe in the skin of the hands and feet."

This sentence, with the following one, explains Harvey's idea, and the two must be taken together to get his meaning. Harvey says that on the application of a moderate amount of cold the blood is sent out of the ferry vessels, and that on the withdrawal of the cold the blood continues through its natural passages, circulating and restoring the heat to the parts. In this there is no idea of porosity that I can discover. He uses the word sanguis, and he connects it with e porositatibus.

We will now examine the word porositates, as found in the seventh chapter.

The sentence in Harvey's text is, "Cujus impulsu (dextri ventriculi cordis) distendi vasa et porositates pulmonum necesse est. Prætea pulmones in respirando elevantur et concidunt; quo motu necesse est ut porositates et vasa aperiantur et claudantur; ut in spongiis contingit, et in omnibus particulis habentibus constitutionem spongiosam, quando constringiuntur et rursus dilatantur."

By porositates et vasa, here, I understand Harvey to mean the pulmonary arteries and the pulmonary veins, and the ferry vessels between them. The translation then would be, "By this impulse (of the right ventricle) the arteries and veins and ferry vessels of the lungs are distended. Moreover, the lungs expand and subside in breathing; by which motion it is necessary that the pulmonary arteries and veins and ferry vessels open and close; as it takes place in sponges and in all matters having a spongy nature, when they are contracting and dilating.

Let us take heed here that we take not the simile for the thing compared.

The modern term porosity is a quality, and how can the verbs distendi, aperiantur, claudantur, be applied to a quality? In other words, how can you open and close and distend a quality? Here "porosity" reminds us of that theatre we read of, the front door of which opened all the way around the house; a door which it would be difficult to shut and to open.

What Harvey did mean here is just what he tells us a little farther on in this same chapter, where he connects the impulse of the heart and the motion of the lungs with the transit of the blood from the pulmonary arteries to the pulmonary veins.

Harvey's words are these (page 46): "Sanguinem per pulmones de vena arteriosa, in arteriæ venosæ ramulos permeare, tum propter pulsum cordis, tum propter pulmonum et thoracis motum." Which every translator, Willis included, renders thus: "The blood passes through the lungs, from the pulmonary artery into the minute branches (ramulos) of the pulmonary veins, on account of the beat of the heart and the motion of the thorax and the lungs." Now, surely ramulos, placed here between the pulmonary arteries and the pulmonary veins, cannot be interpreted "porosity." Ramulos means pointedly

the existence of walled vessels, and mani-

festly Harvey intended it should.

On the same page and in the same chapter as the above sentence, Harvey further says, "Denique clare apparet assertio nostra continue et continenter sanguinem per pulmonum porositates permeare." "At last this is our assertion that the blood continuously and uninterruptedly passes through the ferry vessels of the lungs." Now, if porositates here meant "porosity," would there not be an interruption? Yet Harvey speaks here, as elsewhere, of the current as an unbroken stream: "continuum exinde fluorem motum que fiere" (altera ad Riolan.); "et esse in perpetuo motu" (cap. xiv., ad fin.). Surely, if "porosity" is to be applied

here, Harvey would be made to drown his creatures. The blood would be "viis sti-patis et compressis." The parts would not There would be evil, as be in accord.

Gorgias modestly remarks.

Dr. Da Costa says that Harvey's friend Charleton understands Harvey to use the word porositas in the sense of "porosity," in the sense of Ambrose Paré's word porosité, for Charleton says, "the blood in passing from the arteries into the veins most likely passes into the flesh." Now, it is a fact that not one of the Romance languages has retained the Latin idiom by which ab-

stract nouns are used in the plural instead of concrete nouns. Suetonius says, in delineating the dark character of Tiberius, "Omnes amicitias et familiaritates moriens demandarat." Suetonii Tiberius, 51, fin. "Dying he had assembled all his friends and acquaintances:" it would be absurd to say the dying emperor had assembled his friendships and familiarities. Cicero speaks of "magnas clientelas," when he means multos clientes. And Tacitus speaks of "familiaritates eius," in the case of Agricola, meaning familiares eius. A multitude of such cases could be cited. It is therefore of no use to allege the employment of the French word "porosité," which has not the concrete meaning of Harvey's plural abstract noun "porositates," It is in vain to allege the use, by contemporaneous writers, by Bacon and Milton in Harvey's day, of the English word "porous" as having the meaning of Harvey's word "porositates." Harvey wrote in the Latin tongue, and manifestly observed the rules which governed the great masters of that tongue. It is not to be forgotten that much nicety was displayed in that day by scientific writers generally in regard to Latin idioms.

Harvey certainly paid great attention to the concrete use of his abstract nouns in the plural. Subsequent writers have failed to observe this idiomatic peculiarity, and hence to them the completeness of Harvey's discovery is obscured. In the present status of medical science, when instruments of precision are being used, the thermometer, the watch, the stethoscope, and the microscope, let us take heed that our language, the noblest of all instruments, be precise and perspicuous, as it is the fitting and only means by which man passes his thoughts to his fellow. Especially should this be the case when we act as inter-

preters of one party to another.

Harvey's friend Slegel, too, does not understand the transit of the blood "per porositates;" and so he asks Harvey to explain. In his reply to Slegel, written April, 1651, twenty-three years after the first appearance of Harvey's work at Frankfort, Harvey makes clear the point in question. It is in this letter that Harvey, in speaking of the word anastomoses, says, as Dr. Da Costa quotes, "Our business is not so much to inquire what a word properly signifies as how it is generally understood." Harvey does not use the word porositates once in his letter to Slegel, but in

his text he uses it frequently, and with a very exact knowledge as to its concrete signification and as it was commonly understood by the Greeks, as represented by Plato,  $\pi \delta \rho o \nu \varsigma \dots \delta \pi o \rho \delta \delta o \alpha \iota \pi o \rho \varepsilon \delta o \nu \tau \alpha \iota$ .

Harvey, denying the anastomosis\* between the arteries and the veins mouth to mouth (per copulam) asserted to exist by Galen, says emphatically, "There is a transit of the blood," alluding to the larger signification of the word anastomoses, "and I will describe the one I mean." And please mark his luminous words to Slegel: "perque alios atque alios ductus et meatus; determinate etiam, et alicujus finis gratia; partibus summa providentia admirabilique artificio in id extructis." The translation is, "through ducts and channels in succession and in a relationship determinate and of some end, and that too in parts constructed with admirable forethought and contrivance." Then he comes exactly to Slegel's point of inquiry, and says, "Quæris autem quidnam sit hoc artificium? Quinam illi ductus?" "But, you will ask, what on earth is this contrivance? what on earth are these ducts?" "Nimirum arteriolæ," "verily little arteries," is Harvey's reply.

Now, Slegel not understanding the word "porositates" in Harvey's text, published twenty-three years before, see in this letter how Harvey brings his friend's mind to a focus on the word "arteriolæ," little arteries. In which word Harvey retains his idea of a continuous, uninterrupted, onward passage of the blood from the arteries through to the veins, in walled vessels, "arteriolæ, which admit of no idea of a reflow of the The idea of a reflow had of late been advocated by Cæsalpinus; which idea, too, had been advanced by Galen, and now had held possession of the medical mind for fourteen centuries, and was utterly at variance with Harvey's demonstration. Harvey had already well demonstrated, in the thirteenth chapter of his work "De Motu," that there could be no reflow or return of the blood, on account of the valves in the veins. In his text Harvey wished to use language the meaning of which would not admit of doubt, and in pointing out the transit of the blood from the arteries to the veins he finds no Latin word which embraces at once the idea of the transit and of no reflow of the blood. He could and did use

<sup>\*</sup> Harvey's meaning has been strangely misunderstood by Willis on this point. (Life of Harvey, Lond., 1878, p. 227.)

ductus and ramulos and capillares and other words as meaning walled vessels continuous with the arteries and the veins; but these words do not exclude the idea of the blood going the reverse way at different times, as the waters of Euripus, the strait on the coast of Greece, were said to flow and reflow,—a simile which for ages had been used as representing the reflow of the blood from the veins to the arteries.

Latin is a rigid and unvielding tongue. It is the language of the Pandects of Justinian, of imperial jurisprudence, the stern language of the conqueror to the conquered. In Greek, however, Harvey has no difficulty in finding what he wishes: here indeed he discovers the language of sublime philosophy, a language which, while it conveys to us the bloody laws of Draco and Lycurgus, expresses the warm loves of Hero and Leander, the heroic devotion of Alcestis, the hate of Medea, and the rage of Œdipus. It is the language of Euclid, of Aristotle, of Plato and his master Socrates. It is in Greek Harvey finds that Galen says σπερματικοί πόροι, meatus per quos semen defertur: also θοριχοί πόροι, seminal passages, and οὐρητικὸς πόρος, fistula urinaria.\* It is in Greek that Herophilus, the great anatomist, says αχουστιχοί πόροι, the aural passages.

If these learned men could so speak; if the philosophic Plato could say, πόρους... αποβροαι πορεύονται, the effluences pass the passages, into them, and through them; and again, και των αποδροων τας μεν αρμόττειν ἐνίοις τῶν πόρων, "and the effluences fit into the passages;" if the classic Pindar and Æschylus could tell us of πόρος Ελλης, "the Hellespont," and πόρος Νείλου, "the Nile," πόρος βιου and πόρος Πλουτωνος, the stream of life and the Stygian ferry, surely the practical Harvey can Latinize the same perspicuous term in telling us of the ever onward flow of the great tide he wished to demonstrate. For he indeed was discovering to us Great Nature's Nile, whose constant stream is freighted with a boon more precious than all the wealth of Egypt's river.

In the last part of his seventh chapter "De Motu Cordis," Harvey says, "Illud igitur quod in animalibus, majori ex parte et plane omnibus, dum adolescunt, per patentissimas fieri vias, ex dissectione manifestum est; in adultis his per pulmonum cæcos porositates et vasorum ejus oscula, tam ex Galeni verbis, quam ex ante dictis,

illud idem fieri æque manifestum est." Are not the words "ex dissectione manifestum est" in this sentence very significant, especially when taken in conjunction with the following sentence found in the beginning of his seventh chapter "De Motu," where Harvey is using his double-convex magnifying lens in examining the circulation in living pediculi, bees, hornets, and flies? "Pulsans quiddam intueri, etiam in pediculis . . . perspicelli† ope." (Edition Rotterdam, 1648.) And, remember, with his "perspicellis" Harvey points out and describes the punctum saliens of the egg. (Harveii Opera, page 249.)

In his demonstration Harvey would not say "ex dissectione manifestum est," if he did not mean it. We prefer to believe

that which he tells us.

"But scarce a day, scarce an hour has passed since the birthday of the circulation of the blood, that I have not heard something for good or evil said of this my discovery (in quo non bene et male de circulatione a me inventa audivi). One party holds that I have completely demonstrated the circulation of the blood by experiment, observation, and ocular inspection against all force and array of argument; another party thinks that it is not yet cleared of all objections." (Second letter to Riolanus, first page.)

In the last part of his seventeenth chapter "De Motu Cordis," Harvey writes these remarkable words: "Adeo ut ultimæ divisiones capillares arteriosæ videantur venæ non solum constitutione sed et officio, et sensibilem pulsum aut nullum aut non semper edant, nisi cum pulsat cor vehementius, aut arteriola in quavis particula dilata, aut

aperta magis est."

The literal translation of this sentence is, "So that the ultimate capillary divisions of the arteries appear like veins, not only in constitution, but also in function, and emit no sensible beat, or not always, except when the heart beats more violently, or in some particular little artery, dilated or more open." Harvey says the ultimate capillary vessels never beat, pulsate, unless under the conditions he mentions, cum pulsat cor vehementius, that under these conditions they are enlarged and do beat, that in inflammatory tumors, and also in fevers,

<sup>†</sup>A common double-convex spectacle glass, magnifying only three and a half diameters, gives a clear view of "the capillary vessels." With such a glass I have seen them in the cat.

<sup>\*</sup> See πόρος in Stephani Thesaurus.

they beat, cum pulsat cor vehementius. And this is emphatically true. For did not John Hunter, one hundred and fifty-seven years after Harvey wrote this, demonstrate the truth of Harvey's assertion, that these vessels were enlarged and were made to beat, cum pulsat cor vehementius, after he (Hunter) had ligated the femoral artery for popliteal aneurism?—thus throwing a flood of light on this field in surgery. Is not this very thought—the enlargement of these vessels until they restore the current of blood to the main artery below—the very basis of Hunter's operation?

Is not Hunter's great act the rider of

Harvey's greater thought?

In regard to this passage adeout ultimæ, Dr. Da Costa makes this extraordinary comment: "Now as regards the passage in the last chapter of the treatise on the Motion of the Heart and Blood, in which Harvey states that the ultimate capillary divisions of the arteries appear like veins, and this not merely in constitution but also in function, it is at first sight very difficult to explain. Yet I think he means by divisiones capillares arteriosæ simply the minuter arteries; for he goes on to say they may pulsate in fevers, in inflammatory tumors, and in the fingers." This is indeed the play of Hamlet without the Prince of Denmark.

Dr. Da Costa, in his mental court, leaves out "ultimæ," excludes Harvey's chief witness, and then proceeds to give judgment.

To die is the common lot of man; in the determinate language of Rome, it is "ultima dies," the last day, the day of death. Now, shall we believe that a man expires before the day of his death, his "ultima dies"?

Could the venerable Harvey read Dr. Da Costa's criticism upon this sentence with "ultimæ" left out, he might well exclaim, in the language of his great contemporary, "It is not so nominated in the bond."

The authorities I have quoted, the precedents I have given, and the usage of men of letters I have pointed out as forming part of the common law, and to these I add the deductions of reason observed in the lex scripta of Harvey: all these I adduce in support of the opinion I have expressed in my former paper, that Harvey did know, and was the first to point out under the title of "porositates," that order of walled sanguiferous vessels ending by uninterrupted continuity with the arteries

on the one hand and the veins on the other, vet distinct from both.\*

Harvey, we are told, went to the continent to demonstrate the circulation of the blood to the learned Caspar Hofmann. It is well known that he convinced all the world excepting Hofmann. Surely, if the lofty genius of Harvey failed on that occasion, so humble and distant a follower of Harvey as myself may now take comfort, failing to convince the learned and accomplished Hofmanns of to-day of the completeness of Harvey's discovery.

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# TRANSFUSION OF BLOOD—A NEW APPARATUS.

BY JOSEPH BERENS, M.D.

ASE I.—Hugh H., æt. 56, admitted to the Philadelphia Hospital, prostrated by exposure and insufficient diet, following a prolonged debauch. Urine slightly albuminous. For five days after admission he had been unable to retain any food, and had had obstinate diarrhœa. Upon the sixth day his ex-haustion was extreme; he lay in a stupor, and when roused could scarcely articulate. His pulse was 160, and almost extinct. Transfusion of blood was decided upon. An Aveling syringe was used, the blood being taken from a large vein in the forearm of a healthy man and slowly injected into the basilic vein of About three ounces of blood the patient. had been transfused, when the instrument became clogged by coagula, and the operation was terminated. At the close of the operation there was slight difficulty in respiration, which soon subsided, being followed, how-ever, by a frequent cough, which persisted throughout. Urine drawn five minutes after the operation contained a few blood discs: ten minutes later the number had much increased. An hour later the urine was deeply tinged with blood, and was heavily loaded with albumen.

Immediately after the operation the patient appeared much better; his pulse was fuller, stronger, and reduced to 120 per minute, and he slept quietly, except when annoyed by the cough. An hour after the operation his condition changed for the worse; ædema of the lungs set in, and in three hours more he died.

Autopsy, fifteen hours after death.—Both ventricles of the heart nearly filled by tough fibrinous clots entangled among the chordæ tendineæ and columnæ carneæ. Heartmuscle the seat of cloudy swelling and fatty degeneration. Lungs highly ædematous, and their posterior portions upon both sides the seat

<sup>\*</sup> Malpighi afterwards further elaborated the same subject. Malpighi Opera, London, 1686.

of extensive hypostasis. Upon the pleural surfaces and throughout the pulmonary sub-stance there were numerous ecchymotic patches, many of them, especially the su-perficial ones, presenting the characteristic wedge shape of infarcti. In one instance the infarctus could be traced to a minute embolic plug of fibrine. Under the microscope many of the pulmonary arterioles, especially those leading to the ecchymotic sites, were seen to be plugged with blood-corpuscles, which entirely filled the lumen of the vessel up to a certain point, beyond which the vessel appeared empty and shrivelled. That all these plugs were not small embolic clots appeared from the fact that many of them were much elongated, extending sometimes a distance back into the vessel equal to ten or twelve times its diameter. Their appearance suggested at once the idea of thrombi, formed by a spasmodic contraction of the arterioles, which had in this way resisted the passage of the corpuscles which were seen filling the lumen of the vessel up to the point of abrupt constriction. Around and beyond the point of obstruction the parenchyma of the lung was infiltrated by the morphological elements of the blood, entangled in a fibrinous stroma, and mingled with disorganized epithelium. The liver was cirrhotic. The kidneys were cirrhotic and much congested; the tubuli uriniferi contained many blood-casts.

Case II.-John B., æt. 32, admitted to the Philadelphia Hospital in June, 1875, with a large abscess, which was pointing just below the angle of the left jaw. The abscess was opened without delay, and a large amount of pus liberated. It was then found that the subcutaneous and intermuscular areolar tissue of the neck was extensively infiltrated with pus. Free incisions were made, and the patient put upon a generous diet, with quinine and iron. Upon the sixth day there was a sudden and violent arterial hemorrhage, which was found to proceed from a large eroded vessel at the bottom of the abscess. Before the vessel could be secured, the patient had lost a large amount of blood. A few hours later the ligature gave way, and the patient almost bled to death. The next morning there was a further loss of blood from the erosion of some small arterial twigs lower down in the neck. This second loss of blood completely exhausted the patient, and he lay unconscious, cold, and pulseless. Transfusion was decided upon, and at 4 P.M. four ounces of blood, carefully defibrinated and strained through a fine towel, was injected at the rate of a drachm in fifteen seconds into the radial artery. At the beginning of the operation the respiratory movements had fallen to a few spasmodic efforts per minute, and dissolution seemed imminent. A half-hour afterwards, consciousness had returned in large measure; the pulse could be felt at the wrist, and beef-tea and milk-punch were taken freely. There was a slight cough, with sputum tinged with blood. An hour later the patient conversed rationally, and appeared much stronger. A few moments after this a violent fit of coughing supervened, followed almost immediately by syncope and death.

Autopsy, thirteen hours after death.—The superficial portion of the superior thyroid artery was found included in the ligature, deposited during life. The heart was flabby, with the muscular tissue undergoing commencing fatty change, as shown by the microscope; it also presented a few atheromatous patches upon the leaflets of the mitral and aortic valves. Both ventricles were filled by recent but firm coagula. The lungs were slightly ædematous, and presented the same peculiar mottling which characterized Case I., with the exception that the ecchymoses were neither as frequent nor as large. Under the microscope the same general appearances were observed. In the kidneys there was no evidence of chronic disease, but both organs were much congested. The bladder contained a small amount of highly-colored urine. in which a trace of albumen and a few blood discs were found.

Subsequent to these two operations, experiments were instituted upon dogs. Transfusion was practised by the *mediate* and immediate methods, with varying success. These experiments need not be here detailed. The conclusions reached were that where death follows the transfer of blood from one animal to another it is generally the result either of disordered pulmonary circulation, or, in cases of extreme exhaustion, of syncope, with consequent heart-clots, or of both causes combined; that, under any circumstances, the supply of foreign blood thrown into the circulation so alters the blood-mass that it passes with diminished facility through the heart and vessels, encountering, especially in the pulmonary system, a resistance amounting in some cases, as it would seem, to actual spasm of the arterioles,—this being attributable in some measure to minute coagula or fragments of fibrin, but largely, also, to the fact that the manipulations and exposure to which the blood is subjected in its passage from body to body have a deleterious influence upon it.

It was found further in the course of these experiments that intravenous transfusion was much more apt to be followed by signs of pulmonary obstruction than when the blood was injected into an artery. This may be readily accounted for upon the hypothesis that the capillary system through which the blood must pass before

reaching the heart, acts as a strainer, which removes many of the particles in the injected blood which would otherwise lodge

in the pulmonary circulation.

These observations of the effects of transfusion of blood, in man and in the lower animals as well, have convinced the writer that, of the many objections to be urged against the operation, not a few may be fairly ascribed to defective instruments.

Unquestionably, the great desideratum is to transfer from the giver to the patient the desired quantity of blood as nearly as possible in the condition in which it existed before being drawn from the veins of

the donor.

This object is defeated proportionally as the blood is exposed to change of temperature, unusual commotion, and contact with foreign bodies, whether the surfaces of instruments or a germ-laden atmosphere. The blood must, when exposed to such unusual conditions, necessarily become more or less devitalized, and consequently unfit for circulation.

The nearer the medium of transfusion can be brought to resemble the natural blood-channels, compatibly with a degree of convenience in operating, the better the chances of ultimate success.

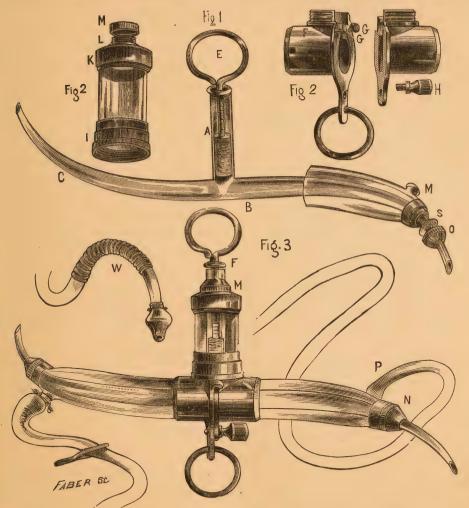
An instrument, therefore, whose inner surface presents the least irregularity of surface, which will maintain the temperature of the blood in its course from body to body, and at the same time preserve it from contact with the atmosphere,—which, in short, imitates the natural blood-channel most closely,—will, cæteris paribus, yield the largest number of successful operations.

The experience of workers in physiological laboratories, where manipulations with blood are constantly in progress, has led to the almost universal adoption of glass tubes in connecting blood-vessels with registering instruments or with each other. The smoother the surface, the less liability there is of clotting in blood in contact with it. Glass offers perhaps the smoothest of all surfaces easily obtained.

The accompanying cut (Fig. 1) represents an instrument made entirely of glass. It consists of two tubes, one-fifth of an inch in diameter, with walls one-twelfth of an inch thick, meeting at right angles, and accurately blown together at the joint. In the shorter, upright tube A a piston E is fitted, which is designed first to act as a pump and draw the blood from

the vein of the giver, and afterwards to propel it into the vessel of the patient. The piston-rod terminates above in a ring, for convenience in operating, and is graduated in quarter-drachms, to indicate the quantity of blood transfused at each stroke. The piston is three-quarters of an inch long, and packed with cotton yarn. piston-rod is provided with a shoulder at F, Fig. 3, so that when driven home there is a space of about one-fifth of an inch between the foot of the piston and the lumen of the longitudinal tube. The ends of the longitudinal tube are drawn out and bevelled at the point, to facilitate their introduction into the vessels. Further, the whole tube is bent in the shape of a modified letter S, the curves commencing at C, an inch from the centre of the tube,—a little nearer the centre than represented. The curves are made upon a radius of two inches, and lie in the same plane, which is at right angles to the upright tube. upright tube is about two inches long, and of about one drachm capacity. whole instrument, excepting the points, is enclosed in a second arrangement of glass tubes, bent to correspond with the inner tube, but larger, being five-eighths of an inch in diameter, thus leaving a space between the two, designed with a view to surrounding the inner tube completely with a layer of warm water, for the admission and discharge of which two smaller tubes, P, P, Fig. 3, are blown into the glass, and connected with a small rubber hose, through which the water enters by a siphon arrangement. The liability to breakage, and the desirability of using a perfectly new instrument at each operation, as well as the necessity—the instrument being in one piece—of a complete change when the varying size of the vessels necessitates larger or smaller points, render it important that the outer tube should be so constructed as to admit of its being readily taken apart and the inner tube changed. To accomplish this, the outer tube is made in three pieces, with metal fittings. Fig. 2 represents the cross-joint. The two tubes F, F fit together by flanges held in place by two hooks, G, G, and are secured by a long thumb-screw, H. The upper portion is cut out, and upon the rim a collar is placed, on which a thread is worked to admit of the upright tube K I being screwed down upon it. A ring is soldered to the lower edge of one of the flanges,

large enough for the finger to pass through, and intended to give a secure hold upon the instrument in operating. At the ends where the inner tube protrudes, caps, N, N, Fig. 3, are placed. Each one of these is in two parts,—a cap, M, Fig. 1, with a thread, and a second cap, O, designed to screw down upon the former and hold in place a small rubber or leather washer, S, to prevent the escape of water at the joints. will be observed that the instrument is unprovided with valves: these have been found unnecessary, the valves in the veins of the giver being generally quite sufficient to prevent any reflux of blood, especially when aided by slight pressure with the finger beyond the points of insertion of the instrument. The shoulder on the piston-rod prevents the piston from protruding into the blood-current, and, further,



The cap M, Fig. 2, upon the upright tube is of the same device and has the same object. The hose should be five or six feet in length, that it may not hamper the operator; the upper portion should be surrounded by a few turns of wire, W, to support it upon the rim of the vessel of warm water; the outlet is provided with a

permits the first blood coming in contact with it to remain as a protecting layer upon the foot of the piston: this insures the fresh supplies of passing blood from immediate contact with the irregular surface of the moving piston. The curves of the instrument are to facilitate the introduction of the points into the vessels. By clip, V, to regulate the flow of water. It rotating the instrument upon the upright

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tube as a centre, the points may be passed in and out of parallel vessels with the great-The extremity of the inner upest ease. right tube has no cap, so that the piston can be withdrawn and the instrument washed without delay, should the necessity arise.

A number of experiments upon dogs have demonstrated the practical utility of this When the operation was instrument. properly performed, the results obtained were unmistakably superior to those derived from the employment of any of the other methods,-the difference being especially observable in the lungs, the ecchymotic points being comparatively few and limited in area. The respiratory disturbance was also less marked after the operation.

In the employment of the instrument a certain amount of skill and delicacy of manipulation is essential, and, where these prerequisites are not wanting, the operation may be performed with prospects of suc-

cess materially enhanced.

Before operating, an inner tube must be selected with points of the proper size. This should then be surrounded by the outer tube, care being taken to adjust the washers so as to make the chamber watertight, and, with the same view, the opposing surfaces of the flanges of the cross-joint should be smeared with wax before being approximated. The piston must then be removed, and that and the whole instrument subjected to a twenty per cent, hot solution of carbonate of sodium that has been recently boiled. This will retard coagulation of the blood upon the inner surface of the tube. Meanwhile, a bucket which is filled with water at about 100° Fahr. may be placed at a slight elevation to supply the siphon.

The arms of donor and patient must now be fastened to splints by means of adhesive plaster, and placed side by side

upon a small table.

The siphon should then be started, care being taken, by the adjustment of the clip upon the delivery tube, that the whole chamber between the two tubes is filled with the water.

The veins of donor and patient may now be opened as recommended in Agnew's "Surgery" (p. 177, vol. i.), or if it be desired to transfuse into an artery, the radial offers the least difficulty.

It may be taken up and tied as near the upper end of the incision as possible, the

ends of the ligature being allowed to remain. A second ligature should be passed under the vessel, for securing the point of the instrument. Finally, a clip or pair of artery-forceps are to be applied to the vessel at the lower end of the wound, to avoid unnecessary loss of blood. After this a V-shaped cut should be made in the vessel. involving fully one-half its circumference. At the proper time the vessel is raised by means of the ligature at the other end, and the point of the instrument slipped in and secured by the ligature provided for it.

When all is ready, the proper point is inserted into the vein of the donor and held by an assistant, or secured by a ligature passed beneath the vein by means of a curved needle. The blood is now allowed to flow till it completely fills the instrument and runs from the open end. should then be quickly inserted into the receiving vessel, and, being properly secured by a ligature or an assistant, the transfusion should be begun without delay. finger should be pressed upon the vessel of the patient near the insertion of the instrument, and the piston cautiously withdrawn, to avoid the admission of air. When the upright tube is full, pressure should be made behind the point in the donor's vessel and the piston driven home, -the same manœuvre being repeated till enough blood has been transfused. vantage should be taken of the transparency of the instrument to closely scrutinize the blood as it flows, the appearance of air-bubbles or the suspicion of a clot being the signal for disengaging the instrument at once and thoroughly washing it in the The capacity of the upsoda solution. right tube being known, the quantity of blood transfused may be gauged by the number of strokes of the piston.

#### SOME SURGICAL WRINKLES.

Remarks made at a Conversational Meeting of the Phila-delphia County Medical Society, held November 13, 1878.

BY JOHN H. PACKARD, M.D.

ENTLEMEN,—It was not my intention to present a paper this evening, although it has been so announced by the Business Committee. I simply desire to bring to your notice certain points in practical surgery that I have found very useful, and which seem to me to deserve to be more widely known. Some of these surgical "wrinkles" will perhaps not be entirely new to some of those present, but they are not in general use, nor, with one exception, have they been published; and those who are already acquainted with their value will perhaps pardon me for again

calling attention to them.

The first point that I shall discuss is a method of making superficial incisions by which scarring can be avoided. In operations upon exposed parts, such as the face and the hand, it is very desirable that they should be so done as to leave as little scar as possible. The procedure that I have to recommend was first suggested to me by witnessing the effects of an accident, a lady having fallen while carrying a china dish, a piece of which made a long, gaping, incised wound in her hand, the sharp knifelike edge of a fragment having cut through the skin very obliquely. After approximation the wound healed readily, almost without scar. The traces of the injury could scarcely be discovered a few weeks afterwards.

Thinking that this effect was in a great measure due to the direction of the incision through the skin, I tried the experiment in cutting down upon a tumor of the thigh, holding the knife so as to divide the skin obliquely. The wound united perfectly, and after it had healed I actually could not find the line of incision. Since that time I have tested the idea in other cases, with highly satisfactory results. In small, superficial operations, such as the removal of small tumors from the face, it has a cosmetic advantage that at once recommends it without requiring further discussion.

The second "wrinkle" is a suture-needle with the eye near the point, for the purpose of introducing wire sutures. The difficulty in using this material arises principally from the tendency of the wire to "kink" in pulling through the tissues. This is entirely avoided by employing a needle with the eye near the point; the needle being pushed through the lip of the wound, the wire inserted into the eye, and the needle withdrawn. The needle is essentially the same as that known as Baker Brown's, having been devised by that surgeon for the operation of closing ruptures of the perineum. It may be either set in a handle or held in a needle-carrying forceps,—the latter being the most convenient form for the pocket-case.

An extremely small portion of the wire need be passed through the eye to cause it to be held securely while it follows the needle in its withdrawal from the wound. It can be used in drawing together the flaps of large stumps, as well as in the thin lips of a simple incised wound, the only difference being that the thicker the tissue the longer the needle required. These are made by Mr. Gemrig of different sizes so as to accommodate even the thickest of silver or lead wire used for sutures.

The next idea was obtained from a quack. through a patient who had been under his care, and concerns the manner of introducing the ligature for a fistula in ano. Here let me say that in the treatment of this affection I have found the ligature, and especially the elastic ligature, a very satisfactory substitute for the cutting operation,—being equally efficient and much less painful. Every one knows how difficult it sometimes is, after introducing a probe through a fistula, to make it project from the anus, and how painful the procedure is for the patient. In order to obviate this we first introduce the probe in the ordinary way through the fistula and into the interior of the rectum. ligature is then carried into the bowel on the top of the fore-finger, in the cleft under the free extremity of the nail. Having the ligature thus in the rectum, it is easy to slip the probe alongside of the finger, which is then withdrawn, leaving the ligature: the latter is now twisted by its two ends until it grasps firmly the extremity of the probe, so that in withdrawing the probe the ligature is carried through the sinus and may be tied in the ordinary way. This is easier to carry into effect practically than to describe. only needful to see that the end of the probe is bulbous enough to prevent the ligature from readily slipping off. those sold are so.

In using the elastic ligature for the treatment of fistula in ano, it usually becomes necessary to tighten it from time to time. It does not tie easily, and the knot is bulky. In order to perform this duty quickly, securely, and without causing unnecessary pain to the patient, I simply cross the two ends and tie an ordinary ligature around them. Either this tying or the subsequent tightening of the ligature can be done without the aid of an assistant, by making two small loops of wire and fastening them to

the ends of the ligature. Having the thread between one thumb and forefinger ready to tie around the ligature when it is drawn tight, the little finger of each hand is inserted into the loops or rings of wire, by which any desired traction can be made upon the ligature, while the other fingers of both hands are free to tie the silk or hempen thread. This I have found a very

useful expedient.

Another point of interest and useful in its application is the "dry suture," for closing large wounds, such as are made sometimes, for example, in removal of the breast. is an old idea, and one with which many of vou are doubtless familiar. Two sheets of the most tenacious of all plasters, Seabury & Johnson's porous plaster, two and a half inches wide and of the length of the wound, are required. These perforated strips are placed one on each side of the wound, and parallel with it. Then with an eyed probe the surgeon can lace the two together over the wound, by carrying a silk ligature or a slender lacing across alternately from the second row of perforations in each sheet, so that the wound is drawn together without any tension upon its edges, but by taking a very wide hold on the surrounding skin. It is a very important thing to bring the wound together in this way, especially since it is well known that as the edges swell in the course of a few days there is a tendency to the cutting through of sutures applied in the ordinary method. The same expedient is useful in treating large chronic ulcers of the leg, where it is desired to reduce a wide granulating surface; and a number of other applications will suggest themselves.\*

I would further recommend the use of reflected light, by means of the ordinary head-mirror of laryngoscopists, in examining other portions of the body, such as the ear, rectum, or the vagina. It is sometimes difficult to move patients; they are heavy, or are so ill that they cannot be placed in a convenient position for examination; the light may be inconveniently located, or the source of light may be a window that may expose the patient to curious neighbors: in all these cases the reflected light from the head-mirror enables us to obviate the diffi-

culty, and to direct the light as we desire, without needlessly exposing the patient. Moreover, it obviates the necessity of the surgeon dodging the shadow of his own head.

Finally, in regard to the first insensibility from ether, I would say a few words, although some of you are already acquainted with its advantages. It is a matter of very great importance, and I beg all of the members to try it for themselves. For the short operations of minor surgery, and the reduction of dislocations or opening of abscesses, it is extremely useful and of every-day application. a patient steps into your office, and you wish to operate without causing him pain or incapacitating him from attending to his business for the remainder of the day. Let him lie down upon the sofa, and take the ether-inhaler, or a sponge wet with ether, in his own hand, directing him to hold the other arm up in the air. breathing the ether for a few minutes, the arm will drop, and you will have from thirty to fifty seconds of unconsciousness in which to operate. The sponge is removed, and the patient is ready to go about his business. It gives rise to no headache, nausea, or other unpleasant symptom, and is particularly useful in children. The chief source of disappointment is in not recognizing the right moment, for if this is allowed to pass, unconsciousness will not again occur until full etherization. The first insensibility is sure to come. When the arm wavers, be ready, and as soon as it drops perform the operation; there will be no pain felt.

# NOTES OF HOSPITAL PRACTICE.

### HÔPITAL TEMPORAIRE.

SERVICE OF DR. DIEULAFOY,

Professeur agrégé.

Reported by Dr. D. M. Guitéras.

PLEURISY.

I PROPOSE to speak to you to-day, gentlemen, about our three cases of acute pleurisy which you have all seen in the wards during the visit. Our patient in ward Ste. Hélène was admitted on the 27th December, complaining of a pain in his side, and having had some chills; this was followed by a cough and an annoying dyspnœa. On auscultation we could find

<sup>\*</sup> In recommending the perforated plaster for the closure of wounds I am aware that the dry suture has been used for years. But the tenacity of this plaster, and the convenient perforations, make it particularly applicable to this purpose, and allow of its being done a great deal more easily than it ever has been before.

neither ægophony, nor blowing, nor friction, and yet he was ill since the 17th. But the pain was present, and it hurt him to cough, to breathe, and also while count-Pain is really the revealing ing for us. sign present in all these three cases. We re-examined this man daily. We found a slight diminution of the vesicular murmur. but the friction would not come,—that friction called friction-râle by Damoiseau. and which Trousseau believed to be not a real friction, but the râles of a concomitant pneumonia. On the fourteenth day of his disease, however, we heard the expected friction.

Our patient in ward St. Louis, who came in on the eighth day of her disease, did not present the friction-sound either, although she complained of pain in the side; and two days later, on the tenth day of her disease, the expected friction was heard, starting, as it were, under our ear. Twentyfour hours later the friction disappeared in this patient, to give place to blowing expi-

ration and ægophony.

But in our patient of Ste. Hélène the friction-sound continued to be heard. Was it a case of dry pleurisy? Was he tuber-culous? The temperature would not come down; the friction continued; the patient would not improve; we were not satisfied. The sixteenth, seventeenth, eighteenth day came, and still the temperature was high. Laennec doubted the existence of dry pleurisy, and Voilez has found only one case out of eighty-one observations of acute pleurisy. I have never observed it myself, and it seems to me we are before the first case I have ever seen. To-day is the twentyninth day of his pleurisy; the dreaded tuberculosis has not broken out; nothing new has occurred; he feels well, eats well, and the friction has disappeared. Of course we do not count now the partial pleurisies of the tuberculous, such as you can observe in No. 26 Ste. Hélène. Cruveilhier thinks, and also Peters, that in cases of pleurodynia there are small partial pleurisies; but we could not expect to find friction in these

Our third patient—No. 22 St. Jean—entered the ward on the eighteenth day of her disease, and we then heard no frictionsound; but she presented the symptoms of effusion, which we calculated to be about five hundred grammes. We observed that peculiar harsh (aigre), smothered (voilé), remote blowing heard as if it originated at a point distant from the ear, and heard during expiration. There was also ægophony, and on percussion an almost tympanitic resonance (skodique) above the level of the effusion. There was no whispered pectoriloquy (pectoriloquie aphone), but two days afterwards it was heard, and today, with nearly two pints of effusion, this sign is typical in this patient; the ægophony has disappeared; her respiration is metallic, almost amphoric; her heart beats under the sternum.

The appearance of the effusion is very irregular; you may observe it from the second to the twentieth day of the disease. there any relation between the effusion and the temperature? It has been said that the temperature follows the effusion. This is an error. The patient who occupied our attention last-22 St. Jean-has manufactured about two hundred grammes per day, and yet the oscillations of the temperature are now very much like what they were when we first saw her.

Treatment.—The pain should be met by dry cups, or, better, by morphia injected hypodermically over the seat of the stitch. I like blisters at the beginning, associated with the hypodermics; but remember that blisters have no effect whatever on a goodsized effusion, any more than jaborandi.

Thoracentesis.—It has been advised not to operate if the temperature is high, to wait for defervescence,—to wait for the dyspnœa; but sudden death by asphyxia may occur. No certain rules can be given for the time of operation. With an effusion of four hundred or five hundred grammes, and even of one thousand grammes, do not operate. With twelve hundred grammes, try still to delay the operation, if the patient seems easy and defervescence near. twenty-five hundred grammes, you must operate; never mind circumstances. Use needle No. 2 of the aspirator, and make your puncture low and posteriorly, on a line with the angle of the scapula, at the eighth or ninth intercostal space. Never draw out the effusion at a more rapid rate than one hundred grammes per minute. When pulmonary congestion supervenes, with rusty expectoration and even hæmoptysis, it is the operator's fault generally; he is using needle No. 4 or 5,—he is emptying the pleura too rapidly. Never empty an effusion of three thousand grammes or more at a single session, but draw out one thousand grammes each day. It is a good

habit always to examine the serum withdrawn under the microscope, and calculate the number of red corpuscles to the cubic millimetre. If you find more than a thousand, there is a tendency for the effusion to become purulent. I remember a case where I found twenty-five hundred per cubic millimetre, and diagnosed a future purulent effusion. At the second puncture, made three days later, the effusion was lready purulent.

Note.—No. I Ste. Hélène and No. 6 St. Louis both left hospital cured, without anything worthy of notice happening after the date of the preceding remarks, the diagnosis in the former case being con-

firmed as that of dry pleurisy.

In the case of No. 22 St. Jean, thoracentesis was decided upon, and fixed for the 23d January. On this date's morning visit, with the aspirator already on the bed, the patient was re-examined, when a remarkable diminution of the effusion was observed. The whispered pectoriloguy and the blowing on expiration had disappeared. and vesicular murmur was heard over the superior two-thirds of the lung. The patient escaped the operation, owing to the good practice of making a physical examination immediately before its performance. This diminution of the effusion was accompanied with a slight rise of the temperature. On the following day she had epistaxis and copious perspiration, with falling of temperature. On the 27th, the return friction (de retour) was observed, and this could still be heard on the 12th February, when she left the hospital, twenty-five days after her admission, cured in all other respects.

## HÔPITAL DE LA CHARITÉ.

SERVICE OF PROFESSOR GOSSELIN, NOVEMBER 18, 1875.

Reported by Dr. D. M. GUITÉRAS.

CONGENITAL CYST OF THE NECK,

I SHOW you to-day, gentlemen, an enormous tumor in a little child 11 months old, which occupies the region of the neck, on the right side, down to the clavicle. It is soft, not very elastic, giving a sensation of fluctuation. I only feel one sac, one fluctuation. I believe it to be a unilocular cyst, although the multilocular cysts are much more frequent. Therefore we have decided to make a puncture with a very fine trocar, for fear of suppurative inflam-

mation, which is very dangerous; and if we find one cyst with thin walls and no other cysts, we will inject the tincture of iodine. [The professor makes the puncture with the needle of an aspirator, and withdraws about one hundred grammes of a very bloody liquid.] This liquid does not assist cicatrization by approximation of the walls; besides, I have observed the presence of other cysts, the most common variety. Then, no iodine injection, because there will be no cicatrization, and the suppurative inflammation is much more to be feared in these composite cysts.

In cases of multiple cysts with bloody contents and thick walls, the suppurative inflammation is sure after injection of iodine. No extirpation here, because all writers have seen strong adhesions with surrounding tissues, vessels, etc., and that it was impossible to remove the sac without injuring them, and hence danger of hemorrhage and of suppuration. There is nothing to do in a case like the present beyond making palliative punctures, in the hope that it will get well and finish by obliterating itself. No large incisions

here, either; avoid them.

In 1839, Cæsar Hawkins, an Englishman, described them well, and characterized the varieties of multiple cysts, they being sometimes adjacent to one another, at other times within one another. In 1852, Werner, a German, wrote another essay; and in 1853, Lorrain, then an interne of Nélaton's, published two observations in Nélaton's service. In 1858, Bouchet, interne of the Pitié Hospital, wrote an excellent thesis on the subject, with a very good clinical classification. These cysts are found more often on the left than on the right side, this one being on the right side. The simple, unilocular ones are best treated with the tincture of iodine injection; the multiple ones require other treatment.

I do not know where or why they are developed. Richer describes them as developing in the lymphatic glands; but this is not demonstrated, nor is there any lymphatic element in these cysts. They are evidently a local affection, the little children always being healthy in spite of them.

As regards prognosis, they are divided into suffocating and non-suffocating, some of them having a tendency to press upon the larynx and trachea and suffocate the child. This one has no such tendency. We do not know what they would become

if they were to be left to themselves, when they are not suffocating. Under the treatment of palliative punctures will they finish by getting well? In the different writings we see more of a hope than of a reality of cure.

#### TRANSLATIONS.

APOMORPHIA FOR THE EXTRACTION OF FOREIGN BODIES FROM THE ŒSOPHAGUS.— Dr. T. Verger (Bull. Gén. de Thérap., 1878, p. 254) was called to see a little girl who had just attempted to swallow a prunestone, which had lodged in the esophagus. He made the child drink a little water, thinking that if this were swallowed some infusion of ipecac could be gotten into the stomach, with a view to causing the rejection of the foreign body by the efforts at vomiting. In vain! Not a drop could be gotten past the obstruction: all was rejected. At this moment a happy thought struck the doctor and his colleagues who were in consultation. "Try apomorphia!" With the aid of a hypodermic syringe .0024 milligr. (1/30 gr.) apomorphia was injected under the skin of the thigh. Two minutes later an energetic attack of vomiting came on, during the first paroxysm of which the prune-stone was rejected. Some curious after-effects of the drug were observed. The child was seized with an irresistible desire to sleep, she could no longer remain standing, and the muscular sense was abolished. This condition lasted half an hour, notwithstanding the child was driven two kilometres in a carriage, and only ceased after she had drunk a cup of strong coffee.

SOLUTION OF CHLORIDE OF SODIUM IN THE TREATMENT OF PURULENT COLLEC-TIONS AND of WOUNDS .- Dr. Houzé de l'Aulnoit (Bull. Gén. de Thérap., 1878, p. 243) found by experiment that a thirtythree per cent. solution of chloride of sodium, when mixed with pus in a test-glass, would sink below the latter and raise it from the bottom of the vessel. The practical application of this fact lay in the necessity of getting rid of the last portions of pus found in pleuritic effusion, for instance, if we would avoid purulent infection, and in the difficulty of doing this by the ordinary methods of aspiration. Dr. D'A.'s first case was one of pleuritic effusion, where injection of the saline solution enabled him to remove the last traces of a purulent deposit and to cure a previously almost desperate case. Subsequently other similar cases were treated in a similar manner successfully, and later a large number of wounds, abscesses, etc., were dressed with the saline and cleansed with the same. Dr. D'Aulnoit's success makes this method of treatment worthy of a trial.

VULCANIZED INDIA-RUBBER IN THE TREATMENT OF BLEPHARITIS.—Dr. Louis Roy (Bull. Gén. de Thérap., vol. xcv., 1878. No. 4), having used the ordinary treatment for this affection without beneficial result in a certain stubborn case, ordered one evening a cotton compress covered with caoutchouc. By mistake the mother of the patient, who was a child of 7, applied the patches of rubber directly to the diseased lids. They were kept on over-night for two weeks before Dr. R. was again consulted, when, to his astonishment, he found that the blepharitis which had withstood his most energetic treatment for months was entirely cured. He has since used this simple application in a number of cases, and always with success. The rubber patch is simply bound over the eye through the night, and the lids washed with warm water and soap in the morning.

A New Method for the Cure of Tape-WORM. — Bettelheim's procedure (Wien. Med. Presse; from Deutches Archiv f. Klin. Med., xxii.) is rapid, and in six cases has proved effectual. He uses a strong decoction of the granati radicis cortex, ten ounces of the pomegranate root being heated with a sufficient quantity of water and evaporated to a quart. The patient, having fasted for eighteen or twentyfour hours, has the bowels thoroughly emptied with castor oil. Half a pint to a pint and a half of the decoction is then introduced into the stomach, by means of an cesophageal tube, at one sitting. Bettelheim expects by this method to drench the worm by a sudden gush of the anthelmintic coming on all sides at once. In the cases coming under his care, some were tænia mediocanellata, some tænia solium. Castor oil should again be administered after the pomegranate, and also enemata of plain water. Medicated enemata are not called for. One of the advantages of this method is its rapidity: only two or three hours are required to detach and remove the worm.

#### PHILADELPHIA

# MEDICAL TIMES.

PHILADELPHIA, DECEMBER 21, 1878.

#### EDITORIAL.

THE report of the Surgeon-General for 1878 is at hand. It contains the usual record of wounds and death received in inglorious combat, the exposures and risks of frontier life making service in the American army as dangerous in time of peace as in other armies during action. The Index Catalogue of the National Medical Library. we are told, is complete to date, and to the library itself have been added two thousand volumes and three thousand pamphlets, bringing up the whole number to forty thousand volumes and fifty thousand pamphlets. The second volume of "The Medical History of the War" is promised during the coming year. Out of fifty-one men examined for the position of assistant-surgeon during the year, only seven were found qualified. When it is remembered that those who apply have almost invariably received special instruction after their medical graduation, the fact that not one-seventh were found fit to take care of the soldiers of the United States augurs badly for the medical handling of the future citizens of the commonwealth.

A GERMAN edition of Dr. Da Costa's "Medical Diagnosis" is about to be published by Hirschwald, Dr. Hugo Engel, of this city, being the translator and editor.

Commencing with the first of 1879, the Archives of Dermatology will be published by J. B. Lippincott & Co., of this city. The editorship will be unaltered, but we understand that the journal will be enlarged, and renewed efforts made in every direction to establish its growing reputation as the most practical journal of its kind in the world.

#### CORRESPONDENCE.

#### BOSTON LETTER.

M R. EDITOR,—Within the past week there has occurred in Boston an event of unusual interest and significance,—the dedication of the new building of the Boston Medical Library Association. Those who are familiar with the medical history of Boston may remember that there was a "Boston Medical Library" so long ago as 1805. In 1826 it ceded its books to the Boston Athenæum; but its name has been rescued from oblivion and attached to the new Association. In the first annual report of the Boston Medical Library Association, the librarian, Dr. James R. Chadwick, states that the movement which culminated in the present Association emanated from the Society for Medical Observation. Be that as it may, let me say here and now that Dr. Chadwick has been the main-spring and the motor power. Others have worked with him, but the untiring energy, the ingenious methods of procedure, the never-say-die push, energy, and determination, have all been his. All unite in the verdict that but for him the library would have failed of its marvellous

About four years ago (December 21, 1874), six gentlemen held the first meeting at the house of Dr. H. I. Bowditch "for the purpose of discussing schemes for a library." Other meetings were held subsequently. Not until August, 1875, was a general call issued for a meeting of the profession. At this meeting (only three years ago, remember) an organization was effected, and officers for the first year were elected. Rooms were taken in a quiet place, and the library began its existence. Books have been poured into it by the hundred. Several societies have deposited their books in the library, one of them to the number of nine hundred and eleven, another four hundred and seventy-four. A collection of two hundred and seventy-one bound volumes of American and foreign journals was obtained for a song from the former publishers of the Boston Medical and Surgical Journal, the Boston Dispensary turned over a library left in their building by a late physician, and so on. Medical gentlemen by the score sent in books, in large or small number. Dr. William Read presented an obstetrical library of two hundred volumes, "containing nearly all the standard publications on midwifery that have appeared in England during the past century."

Another purpose of the Association was the establishment of a reading-room well provided with current medical literature. So long ago as October, 1876, the Association was regularly in receipt of one hundred and twenty medical journals, the majority being contributed. At this time, too, there were one hundred and thirty-three members whose annual fee, ten dollars each, had paid the running

expenses and half the expenses of furnishing. the balance being defrayed by the voluntary contribution of friends. Moreover, the Association entered upon its second year with a library of four thousand five hundred volumes and three thousand pamphlets, free from debt. This was at the close of the first year; and I mention these data merely to show you what wonderful strides the Association has taken from its very inception. The same rush of success followed it during the year 1876-77, and by the time the second annual report was read the number of volumes had been increased by one thousand nine hundred and seventy-eight, eight hundred of which were the gift of the late Dr. E. H. Clark.

Of course books will not come together of their own accord: fancy, then, what an amount of push and drive has been expended upon this work. Now already had come the need of more elbow-room. The reading- and the book-rooms had become uncomfortably stuffed with books, and the dear old things lay in heaps all about. There was danger that they would crowd out the readers. Besides, there were no efficient means of protecting the books from fire. For these and various other reasons, the executive committee had the audacity to purchase a house in Boylston Place, just off Boylston Street, quite near the Common, and backing up nearly against the Public Library building. Owing to depression of real estate, the house could be secured at a low rate, five thousand dollars to be paid down, balance secured by mortgage. All it was necessary to do was to raise the five thousand dollars. Of course it was raised. Chadwick has not been balked yet, and probably will not be. The original building was forty by twenty-seven, on a forty by sixty-five feet lot. The inside partitions on the lower floor were torn down. A one-story L ("back-building" you would call it) was added, the floor of the addition was lowered until the place was converted into a sort of amphitheatre,—that is to say, there are rows of seats one above the other, the general form of the hall being a parallelogram. The hall is sixty feet long, has light and graceful galleries, giving access to book-shelves which reach the ceiling. It is a pretty, inviting room, lighted mainly by means of an immense lantern,—the glass roof of the one-story L,—which encloses many gas-jets, is closed from below by ground-glass valves,—in short, admits sunlight, gas-light, and air. The arrangements for ventilating and heating are as perfect as modern science and wise heads can make them. The building was formerly a dwelling-house, and the rooms on the second floor were simply converted into a journal- and reading-room. The latter is delightfully cosy and attractive, having easy-chairs, open fire, etc. The third floor is occupied by the resident assistant librarian, Dr. Edwin H. Brigham, a hard worker, and just the man for the place. There are several

extra rooms, which may be used as committeerooms. Heretofore three of the five medical societies have held their meetings in various rooms of a building on Temple Place. Hereafter they will meet in the beautiful hall of the library building, thus not only increasing the revenue of the Association but retaining within the profession large sums now paid to outside parties. Moreover, the library will become a medical centre. Physicians will make engagements to meet there. There is every facility for social gatherings, and it is to be hoped that there will be a club-night, on which the members will meet as a club and not professionally. Sociability among medical men needs cultivation in Boston. It is a serious need, which is very apparent when one has seen the far greater sociability among physicians of other cities. Of the building there is nothing more to be said, save that it has been made exceedingly attractive. Its finish and appointments are in excellent taste. library now contains ten thousand volumes and five thousand pamphlets, and is one of the largest in the country, there being only three, or perhaps four, which outnumber it. As to its quality and character I shall have

more to say in future.

On Tuesday evening, December 3, the house was dedicated. Dr. Oliver Wendell Holmes, President of the Association, read an address which abounded in wit, grace, and instructive suggestion. It will appear in full in the Boston Medical and Surgical Journal for December 12. I would commend it to your readers; they will find it very enjoyable. Dr. John S. Billings, of Washington, followed in remarks of much interest concerning the National Library. There were other addresses, by Prof. Winsor, Librarian of Harvard College, who hoped the medical branch of the Public Library and the library of the Harvard Medical School would co-operate with the library of the Association; by Dr. Geo. H. Lyman, President of the Massachusetts Medical Society, who claimed that the library was a legitimate outgrowth from the State Society; by Prof. Eliot, President of Harvard College, who saw in the library the self-defence and progress which are peculiar to professions, sciences, and industries in America, where government does not interfere as it does in other countries; and by Dr. David P. Smith, of Springfield, Vice-President of the State Society, who earnestly hoped the influence of the Association would be felt throughout the State. He considered the Association a club in which fraternal feeling would be cultivated. Dr. H.I. Bowditch, Vice-President of the Association, made the final remarks. He felt that the laity as well as the profession owed a debt of gratitude to the young men who have established this library, and that it would be only just to call upon the laity for assistance. Dr. Bowditch has been greatly interested in the development of the Association. The first meeting

was held at his house, and he has been an active worker ever since. During his remarks he told the story of a poverty-stricken German who came to him dying of consumption. This was in the early years of the late war. He found his patient to be a German nobleman, who had come to this country to escape the tyranny of his own. When he died, his widow placed his papers, etc., in the hands of Dr. Bowditch. Among these were the ancestral tree of the family and a volume of autographs of great value. After some years, the widow presented this book to Dr. Bowditch, who found therein the autograph of Fabricius Hildenus, a German surgeon of eminence in his day, dated at Berne, 1626. This Dr. Bowditch presented to the Association in a beautiful frame.

Dr. J. B. S. Jackson moved that the chair appoint a committee of five gentlemen, whose duty it should be to memorialize Congress on the subject of indexing the National Library, funds for which, Dr. Billings had already remarked, it was very difficult to obtain. The

motion was seconded and passed.

The hall and reading-room were illumined by forty portraits of deceased physicians, some of whom are historical. A few evenings after the dedication, the Rev. George E. Ellis illustrated these portraits by many inter-

esting and amusing anecdotes.

The dedicatory exercises were of a most pleasant nature, and the audience of physicians, among whom was Dr. Fordyce Barker, of New York, were surprised and delighted by the unexpected beauty and convenience of the rooms, and profoundly gratified by the final establishment of this much-needed medical centre. The Societies also, undoubtedly, will welcome this opportunity for a removal from rooms which are cramped, old, and shabby, and moreover are three flights from the street, into the bright, pretty, accessible hall of the library building. In Boston there are five medical societies, varying in number of members and activity. These are the Suffolk District Society, branch of the State Society, the Society for Medical Observation, the Society for Medical Improvement, the Obstetrical Society, and the Society of Medical Sciences.

These Societies hold monthly or semimonthly meetings during nine months of the year. The Society for Medical Observation devotes itself to clinical discussion and research. The number of its active members is limited to forty. It has a fine library, now deposited with the new Library Association. The Society for Medical Improvement makes a specialty of pathology, and owns a valuable anatomical collection, now in keeping of the Medical School. The title of the Society of Medical Sciences indicates its purpose,—the advancement of sciences which are related to medicine. The Suffolk District Society is a branch of the State Society, and its meetings naturally are more largely attended than those of any other Boston medical society. No special subject is discussed: any topic which has a bearing upon medicine or surgery, hygiene, drainage, climate, and the like, is in order.

It is a matter of considerable pride that these and the meetings of other medical societies in Boston are attended by the older members of the profession. This is an example which other cities might follow with benefit. The cap will be found to fit wherever society-work is done mainly by young men. The Suffolk District Society invariably has a good attendance. The question sometimes arises as to what proportion of the members is influenced by the closing line of the secretary's notice, viz., "Supper, etc., at nine o'clock." The answer properly might be, If there are members who otherwise would not come, we are glad the supper is a controlling inducement. The expense of it is defrayed by voluntary contributions of the members, and it is an institution which has secured a strong hold. It is a sensible arrangement, for added to a certain gastronomic pleasure is the opportunity for social converse

and gossip. A physician who moves into Massachusetts, or is a recent graduate, may become a Fellow of the State Society without delay, if he but satisfy the Censors of his eligibility. Many candidates are regularly examined by the Censors; others are passed upon their reputation. In order to obtain admittance to other societies here, a professional residence of at least one year is required, but the examination is not. There are two other Boston societies which should be mentioned. One is called the Boston Medical Association, organized in 1806, and in 1808 adopted certain principles which still remain the foundation of a code governing all regular practitioners established in the city. Another of its objects was the establishment of a fee-bill, which is in force to-day. The Society holds but one meeting yearly. The Massachusetts Medical Benevolent Society is the other of these two bodies. Its organization dates from 1857, its incorporation from 1871. Its purpose is the relief of its members or their families in case they require assistance, and of such other members of the medical profession, or their families, as may be deemed deserving of its benevolence. It includes physicians from all parts of the State. Endeavor is constantly made to widen its field of usefulness. There is nothing peculiar in the manner in which society-work is conducted here, except that gentlemen who read papers or report cases are questioned by members, who in most instances retain their seats instead of rising.

I had nearly forgotten a society which might be imitated with benefit in Philadelphia. This is the Boylston Medical Society of Harvard University. It was organized in 1811, and its

object is to stimulate emulation and inquiry among the students of the medical department of Harvard. The members are students of the school. The entrance-fee is two dol-The meetings are held once weekly, in the evening. The president of the Society is a physician, and is elected by the active members. A committee nominates members, each of whom, on his appointed evening, reads a paper, in regard to which he is questioned by his fellows, and the topic is then open for discussion. You can easily see how very beneficial such a society must prove. The custom of appointing readers of papers is also common to some of the societies which I have already mentioned. In regard to the Boylston Medical Society, I may further say that it is in possession of a fund, the gift of the late Dr. Ward Nicholas Boylston, the income of which is devoted to prizes. Of this matter I will speak in detail hereafter.

Boston, December 10, 1878.

#### PROCEEDINGS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF PHILA-DELPHIA.

THURSDAY EVENING, OCTOBER 24, 1878.

THE PRESIDENT, DR. H. LENOX HODGE, in the chair.

Report of several cases of tumors in the larynx.

By Dr. Carl Seiler.

THESE cases are reported not because tumors in the larynx are uncommon, but because they show some remarkable features not often met with, and also because they demonstrate the necessity of a careful laryngoscopic examination in all cases of partial or

complete aphonia.

Case I.—Mrs. B., æt, 32, applied to me for a stubborn hoarseness which had been annoying her for the last two years. Her voice was hoarse, both in singing and speaking, but to no very great degree, and before I had made an examination of the larynx I was convinced that the case was one of unilateral paralysis of the vocal cords. She had been under the care of several physicians, and had taken large quantities of cough syrups and tonics. A laryngoscopic examination showed a small nodule on or in the free edge of the left vocal cord, projecting slightly into the glottis. The right vocal cord was notched in its free edge at a point opposite the nodule in the left cord; both the nodule and the notch being at about the middle of the length of the cords. In phonation a complete closure of the glottis took place, the nodule fitting into the notch, but an unequal vibration of the cords could be observed. The right cord was slightly red-dened, while the left was normal in color. The tumor being imbedded in the substance of the cord, and too small for instrumental interference, I endeavored to absorb it by applications of strong solutions of nitrate of silver,—eighty grains to the ounce. After two months, the silver having been applied daily, the voice had assumed its natural tone, and the cords appeared perfectly normal.

Case II.—George G., æt. 52, a laborer, presented himself at the dispensary for diseases of the throat at the University Hospital, complaining of complete loss of voice for eighteen months. His family history was not good, his father and one brother having died of phthisis, and he had been losing flesh for some time past. A physical examination of the chest revealed no lung affection. On laryngoscopic examination, a nodule of the size of a mustard-seed was found to be imbedded in the edge of the left vocal cord, which was also paralyzed, failing to meet its fellow on attempted vocalization in the median line. The larynx appeared otherwise normal. Absorption by nitrate of silver was again decided upon, first by solutions and then in the solid form melted on to the end of a silver probe, but without apparent success, the applications having been kept up for six weeks

The general health of the patient was, however, very materially improved, he having gained several pounds in weight. His larynx by that time had become so tolerant to the sound or brush that I was induced to try electrolysis in order to cause an absorption of the growth. For this purpose I attached a needle to the end of a laryngeal rheotrope, and succeeded, after a few trials, in imbedding its point into the tumor. The other pole was placed on the neck opposite the larynx, and the current from twenty small zinc cells was passed through the growth, which had the effect of heating the point of the needle to a high temperature, which was shown by the change of color of the steel. The current was kept passing for about thirty seconds, and the rheotrope was then removed. The vocal cord, when seen the next day, was considerably inflamed and swollen; not more so, however, than might have been expected. flammation disappeared in a few days, and the nodule was seen to be very much reduced The nitrate of silver applications were then resumed, and the growth disappeared entirely in two weeks after the introduction of the needle. The voice was, however, only partly restored, as the paralysis of the cord remained, although not as complete as before. The treatment could not be followed up, as the patient was unable to remain in the city any longer.

Case III.—Miss S., æt. 21, applied at my office for a partial failing of her voice. She told me that in singing it had of late become impossible for her to reach and hold the higher notes, and that her throat felt fatigued after very little singing or talking. A slight

huskiness was observed also in the lower notes. She complained of no pain or any symptoms of throat disease, except a slight increase in the mucous discharges, especially in the morning. On laryngoscopic examination the pharynx was seen to be in a state of subacute inflammation, and the mucous membrane of the larynx congested. The vocal cords were reddened, and on the edge of the right cord near the middle a slight elevation or nodule of the size and shape of a pin's head was observed. This produced a slight separation of the vibrating edges of the cords in vocalization, and explained the symptoms.

Absorption by nitrate of silver was again resorted to, and the growth disappeared very rapidly, so that after two weeks nothing could be seen of it, while the voice had regained its former clearness and vigor also in the upper

notes of the scale.

Case IV.—This case I saw in consultation with Dr. Yocum, who asked me to make a laryngoscopic examination on a Mrs. P., one of his patients, who complained of hoarseness and of failing of the voice, she being a

professional singer.

The examination revealed two nodules on the edge of the right vocal cord, projecting slightly into the glottis, and preventing a close approximation of the edges of the cords in vocalization. The growths being too small for operative interference, I advised the use of nitrate of silver, which was employed in the form of inhalations by the steam atomizer, as topical applications of the reagent were impracticable. Under this treatment the hoarseness gradually disappeared, but has lately returned, the inhalations having been given up by the patient. Unfortunately, I could not obtain another laryngoscopic inspection, and can therefore not state as to the amount of absorption produced by the inhalations.

This class of neoplasms, imbedded in the tissue of the cords, is to my knowledge very rare, and in looking over the literature on the subject but very few cases are reported. Prof. Türk mentions eight cases, and Dr. Lefferts, of New York, in a recent article in the Medical Record, mentions two cases, all occurring in professional singers. Of the four cases described above, three occurred in the larynx of singers, and but one in a laborer. As to the nature of the neoplasms it is rather difficult to form an opinion, as they cannot be subjected to a microscopical examination; but from the fact that they are almost exclusively found in singers, and that they yield readily to the applications of silver, it is highly probable that they are the result of an inflamma-tory process localized as a hyperplasia in the submucous tissue of the cords.

A case of tumor in the larynx exhibiting marked peculiarities in regard to the position of the tumor and the effect of its presence upon the voice of the patient may be described as follows:

Case V.—Mr. A., æt. 24, a student of elocution, applied to me for the cure of a peculiar huskiness in his voice, which interfered markedly with his exercises in elocution. He said that he had noticed this hoarseness for several years back, but of late it had become worse. He complained also of dryness in the throat, copious expectoration of mucus, especially in the morning, and of frequent frontal headache.

On examination, the mucous membrane of the pharynx was found to be injected and granular, the congestion extending upward into the posterior nares, where a small abrasion, near the opening of the Eustachian tube, on the left side, was noticed with the rhino-

scope.

A larvngoscopic examination revealed at a glance the cause of the hoarseness. A brightred tumor, the size of a small French pea, was seen to be situated on the surface of the right vocal cord, a little anterior to its middle. tumor did not project over the edge, which was slightly drawn in at the seat of the growth. The right cord was also slightly congested, while the left was perfectly normal. On vocalization the glottis was closed, with the exception of a small slit-like opening opposite the tumor, and a difference in the rapidity of vibration of the two cords could plainly be observed, causing the peculiar character of the voice. In an attempt to sing a low note (the patient having, as he told me, a bass voice) the affected cord utterly refused to vibrate, and no sound was emitted from the larynx. I decided at once to remove the tumor by means of a laryngeal forceps, and, as the patient's fauces were very tolerant to the presence of the laryngeal mirror, it was deemed an easy matter to seize the growth. On introducing the instrument, however, I found that the ventricular bands or false vocal cords closed at the approach of the forceps, completely obstructing the view of the glottis. After several weeks of daily practising on the patient, I finally succeeded in grasping the growth in the blades of the forceps and removing it. There was hardly any hemorrhage following the operation, and the subsequent inflammation was very slight. Immediately after the removal of the tumor the voice became considerably clearer, and the patient was able to sing several tones lower than he could before. The wound was treated for a few days with nitrate of silver, until it was completely healed, when the congestion of the cord disappeared, and the voice became perfectly clear. It was much more difficult to take hold of this growth than I had anticipated, not only on account of the approximation of the ventricular bands, but also because the tumor was attached with a broad base upon the surface of the cord.

The tumor proved to be, on microscopic examination, a fibro-cellular growth.

Case VI.—James M., æt. 12, was sent to

the University Hospital suffering from dyspnœa and loss of voice. Dr. W. Pepper, on examining the case, discovered, by means of the laryngoscope, a large papillomatous growth filling the cavity of the larvnx almost completely, and leaving but a small triangular opening, through which the air rushed with a whistling noise. Dr. Pepper at once decided to remove the growth with Mackenzie's laryngeal forceps, and succeeded in tearing off several pieces, which gave the patient slight relief for a few hours. The case was then handed over to me, and I removed several pieces every day for several weeks. impossible to continue the sittings beyond a few minutes at a time, on account of the feebleness of the patient, due to the want of oxidation of his blood. All this time I noticed that the tumor did not decrease in size, but rather grew larger, and gradually encroached upon the small breathing-hole. Being obliged to be absent from the city for a few days, I asked my friend Dr. J. S. Cohen to operate for me, and he also removed several pieces from the growth, with but temporary relief, and I found the tumor larger on my return. By this time the difficulty of breathing had become so great that it was deemed advisable to perform tracheotomy. This was successfully done by Dr. J. Ashhurst, Jr., and the patient rapidly gained strength, the wound healing satisfactorily. Two weeks after the operation the attempts at removing the tumor were again taken up, and, as it seemed, with great success; piece after piece was removed, and the growth seemed to diminish in size. while the voice became stronger. Suddenly, however, the tumor again began to grow more rapidly than before, and could not be reduced by the forceps. Strong nitric acid was then brushed over its surface, with no better result, as it continued to grow.

The patient being desirous of returning home, and feeling very comfortable with the tracheotomy tube in his trachea, he was allowed to leave the hospital, with the understanding that he should return at some future time, when I intend to open the larynx and

remove the tumor.

The remarkable feature of this case is the very rapid growth of the neoplasm, which proved on microscopic examination to be a papilloma.

(To be continued.)

## PHILADELPHIA COUNTY MEDICAL SOCIETY.

A T a conversational meeting, held at the hall of the College of Physicians, Philadelphia, November 13, 1878, Prof. Henry H. Smith, President of the Society, in the chair, Dr. John H. Packard made some observations upon certain practical expedients, under the title of "Some Surgical Wrinkles" (see page 130).

Dr. John H. Brinton said that he could endorse the remarks made in regard to the primary unconsciousness from ether, from his personal experience. Having a very painful carbuncle some months ago that needed opening by a free incision, he had adopted this plan, at the direction of Dr. Packard, with the best results. He regards it as of great value in enabling us to avoid the discomfort and inconvenience following the ordinary administration of ether. After a few inhalations a sensation of coldness of the face is experienced, followed by vertigo and roaring noises in the ears; at this time the arm wavers and drops, and the operation or incision is made absolutely without pain. Since that time he has constantly employed it in his practice in dividing strictures, laying open sinuses, and generally in operations which require but a moment to perform. Direct the patient, while holding up his hand, to tell when his head begins to go around; this will notify you to be ready to operate immediately upon the hand falling. The patient experiences no bad effects whatever from the ether, and is able to return at once to his business. Dr. Packard deserves great credit for being the first to recommend this useful expedient to the profession.

In regard to the oblique incision in superficial operations, he had tried it several months ago, at Dr. Packard's suggestion, and had since frequently repeated it. He had by this method obtained marvellous results, even

better than claimed by the author.

The Chairman inquired of the lecturer whether he could give any explanation, physiological or otherwise, to account for the absence of cicatrix after the oblique incision.

The lecturer explained that in a direct incision the granulations fill up the wound from below, while the oblique incision forms what might be called almost a subcutaneous wound, which favors healing with little scar. The surfaces brought together are also larger and admit of more perfect apposition than in the vertical section.

Dr. Brinton attributed it to the latter cause. The Chairman said that the apparent absence of cicatrix may be due to the fact that the different layers in which the inodular tissue is deposited after the oblique incision will not be in the same perpendicular plane

as they are in the vertical incision.

Dr. Charles T. Hunter expressed the opinion that although it was evident that the edges of small wounds could by this means be better approximated, he would consider that there was an objection to its use where there was a tumor like the mammary gland which required removal, on account of the trouble in making the oblique edge to the flaps. In superficial wounds of the skin the sutures are often twisted too tightly; as a result, there is inversion of the edges, and two epidermic surfaces are presented to each

other, which enter into the cicatrix. This could not occur with the oblique incision.

The question in reference to the first anæsthetic effect of ether is very valuable, and he had utilized it for several years. In a case of palmar abscess, in which he had recently employed it, only a few inhalations were

required.

In regard to the needle, he believed that in practice great difficulty would be found in threading the eye, which, as it is so close to the tissue, must get clogged with blood. The eye is too small. It might be serviceable in small wounds; he did not think that it could be used where there was much muscular tissue in the flaps.

The porous plaster he had found very useful for extension in fractures and to regulate the tension upon the edges of wounds. After removal of a mammary gland he is accustomed to bandage the corresponding arm across the chest, and finds that in this way there is less danger of gaping of the wound.

The Chairman inquired what was meant by

porous plaster.

The lecturer explained that a very adhesive plaster regularly perforated with small holes, is generally known by this name; it is made of caoutchouc, resins, and other substances, and is supplied by Seabury & Johnson, of New York.

Dr. Chas. Wirgman said that the article is made by a patented process, and probably contains caoutchouc, gum frankincense, etc., and receives its name from the perforations or

pores

Dr. Packard, in replying to Dr. Hunter, said that in the removal of a large tumor he could not see what difficulty there was in making the upper incision to bevel in one direction and the lower to bevel in another; but the expedient was recommended more for small incisions on exposed portions of the

body than for general surgery.

In regard to the needle exhibited, he had used similar ones for eight or ten years exclusively in his operations at the Episcopal Hospital and in private practice, and had not experienced the difficulty mentioned. Different sizes can be obtained sufficient to carry the largest size of silver or lead wire. Instead of the eye of the needle being obscured by blood, we find it to be wiped clean in passing through the tissues.

Dr. Henry Leaman thought that there was one objection that might be urged against the oblique incision through the skin, on anatomical and physiological grounds. The upper layer of the skin consists of cells which owe their origin to the corium beneath. In the oblique incision the upper layer of cells is separated from its source of nutrition, and, in all probability, would die and be cast off. In this case eversion of the lips of the wound would be apt to occur, to which Dr. Hunter has alluded

The lecturer said that the oblique incision was only recommended for the purpose of avoiding scar and to facilitate healing in small wounds; but even in larger operations this bevelling of the edges would give larger surfaces for apposition, and favor union by first intention. In making incisions upon the hands and face, where it is of so much importance to avoid a scar, he has had unmistakable evidence that the cicatrix has been far less than if he had operated in the usual manner

## REVIEWS AND BOOK NOTICES.

TRANSACTIONS OF THE AMERICAN GYNÆCO-LOGICAL SOCIETY. Vol. II., for year 1877, Boston, Houghton, Osgood & Co. Cambridge, Riverside Press, 1878.

Cream will not rise the thicker because we expect it, nor is there sovereign power committed to any medical society, even the Gymedical papers, and say, "Up to this standard must ye come." To a certain extent the effort to force into being an unusually brilliant volume is generally futile. There is, however, some advantage in aiming high. No better volume of the kind ever issued from the American press than vol. i, of the Gynæcological Society, and the present volume, No. 2, is full of interesting articles, and sustains the Society's already full-grown reputation. But, while much larger, we doubt whether the real solid matter of the various papers quite equals that of its predecessor. Its increased size would bear condensation; its pages of diffusely-narrated cases could often be tabulated, and the resultant volume be much more impressive. The faintest evidence of dry-rot in any volume of transactions by any society calls for instant atten-Already here and there through the seven hundred pages the machine paper lifts its Gorgon head and glares upon the unhappy reader, turning his mind to stone. It is just possible, too, that one misses in the present volume that infusion of the effete brain of Europe which was so happy in vol. i. are no papers by Duncan and Barnes, but, if the book is thereby made more truly representative and American, as befits its name, the truly patriotic physician should rejoice.

The annual address by Dr. Fordyce Barker gives the Fellows some excellent advice concerning the election of new members and the difficult task of weeding out the unproductive. In a warning against reckless enthusiasm merely "for the éclat of operations," we happen upon this sentence: "The sole justification of any operation which involves suffering and danger to the subject must be the strong probability, based on a scientific knowledge, that compensating good will be

the result." A good sentence to inscribe in letters of gold over the surgical amphitheatre, where it could catch the operator's eve and steady his hand. The distinguished speaker expressly stated that his remarks implied no covert condemnation of the surgical treatment of uterine fibroids or the incision of the cervix uteri for stenosis; but he evidently had in mind the subject of "normal ovariotomy," as shown by two cases narrated from personal experience, where the operation considered necessary was not needed. The very varied character of the contents of the book forbids a detailed notice of the individual papers. They will be found to embrace almost every topic of interest to the gynæcologist. Dr. Battey contributes one with the unique title, "Is there a Proper Field for Battey's Operation?" in which it would be quite too much to expect a perfectly impartial argument as to the necessity for an operation the invention of which he claims. His position, were he to convince his readers that no such necessity exists, would be indeed unenviable. His argument begins with the enigmatical sentence, "The highest of human duties is to live;" but we fail to catch the application of the words, unless he would imply that the operation is legitimate because he lives by it and would perish without its pecuniary rewards. If he had written, highest human duty is to save the lives of others," he would at least have been intelligible, and have opened up the whole subject in a candid way as to how far we are justified in abridging the lives of some that the lives of others may be prolonged, and what degree of pain justifies a patient and his or her surgical adviser in placing that patient's life in imminent peril for the chance of permanent relief. The discussion which followed the above paper possesses peculiar interest, the author being treated throughout with the greatest fairness and consideration.

The discussions throughout the volume are, perhaps, its most attractive feature; while the remarkable typography, beautiful binding, and excellent paper are but fitting adjuncts to its contents.

## GLEANINGS FROM EXCHANGES.

THE CONTAGION OF PHTHISIS.—The Lancet (November 23, 1878) calls attention editorially to a matter of the greatest importance, as follows:

The remarkable instances now and then seen, in which persons without hereditary tendency to phthisis become phthisical after long-continued attendance on sufferers from the disease, have suggested to many physicians the idea that phthisis is contagious. If there is such a contagion, the mechanism has

been supposed to be the inhalation with the breath of fine particles of tuberculous sputa. atomized into the air by the patient's cough. An attempt has been made by Dr. Tappeiner. of Meran, to ascertain whether by a similar means animals could be rendered tubercular. and the results of the experiments, which are published in the current number of Virchow's Archiv, are of great interest. The animals experimented on were made to breathe for several hours daily in a chamber in the air of which fine particles of phthisical sputum were suspended. The sputum having been mixed with water, the mixture was atomized by a steam atomizer. In all cases the sputa were from persons with cavities in their lungs. Dogs alone were employed in the experiments, since they very rarely suffer from spontaneous tuberculosis. The result was that of eleven animals experimented on, with one doubtful exception, after a period varying from twenty-five to forty-five days, all, being killed, presented well-developed miliary tubercles in both lungs; and in most of the cases tubercles were present to a smaller extent in the kidneys, and in some cases also in the liver and spleen. Microscopical examination was in accord with the naked-eye appear-

The quantity of sputum necessary for the effect is certainly a very small one. In three experiments only one gramme of sputum was daily atomized in the air of the chamber, and the quantity of dry sputum must have been exceedingly small. Two ways are conceivable in which the infection is produced. particles certainly may reach the alveoli, for powdered cinnabar administered in the same way was found to have stained the alveoli in twelve hours after an inhalation of only one hour's duration. But some particles may lodge in the mucous membrane of the throat and pharynx, and thence, being absorbed, may affect the lungs as organs specially predisposed. Hence some comparative experiments were made by feeding dogs with the same sputum as that employed in the inhalation experiments. Fifteen grammes were mixed daily with the food of each dog. In two dogs fed at Munich, miliary tubercles were found in the lungs after six weeks' feeding; in six others fed at Meran, all the organs were normal,—a difference the explanation of which is not very clear. In the cases in which the disease was produced by feeding, the intestinal tract was affected, whereas it was free in those cases in which the inhalation was employed. It is remarkable that, with two exceptions, the animals, up to the time at which they were killed and found diseased, were well and lively, and indicated their disease neither by emaciation nor other external symptoms. This suggests that sometimes in man a miliary tuberculosis of the lungs may remain latent, and cause no symptoms until a catarrh, with foci of inflammation, sets up phthisis.

## MISCELLANY.

PROBABLY the English medical author best known in the United States at present, always next to Sir Thomas Watson, is Dr. J. Milner Fothergill. He has an easy, transparent, and interesting style, and he uses the most recent and recondite medical knowledge to illustrate his points in such a way that his readers cannot fail to appreciate them. Fothergill is very accessible, has a great deal of genuine bon-homnie, with no end of North-country shrewdness, and, I believe, has a regard for American physicians, based on a fortunate experience in meeting first class-men pursuing their studies, like himself, in Vienna. Fothergill is known among his London familiars as "the Claimant." In size and appearance he is said to resemble the famous Tichborne pretender: hence the name. He weighs about three hundred pounds, and he puffs and blows, as he rolls along the Queen's highway, like a steam-engine. His face is red, his voice loud, and his laugh is like the explosion of a volcano. He wears in London a broad-brimmed hat like a Mexican sombrero, and a thin coat like an American sack. He suffers from the heat. When he takes his bandanna from his pocket and wipes the sweat from his forehead, and then clears his throat preparatory to speech, the world attends. A London paper of the personal kind, the other day, told a story, the hero's name concealed, but it could be none other than Fothergill:

"A physician, returning late the other night from visiting a patient, was assailed by a foot-

"'What did you do?' said his friend to

whom he told the story.

"'Fell on him and mashed him. He was never seen afterwards."

If Fothergill were anything else than the man of genius, the true friend, and the kindhearted physician, these peculiarities would tell against him; but no one possessed of the least discrimination could fail to see, under this rather rough exterior, the highest qualities of a superior manhood. Long may he live to write books and to have thousands of readers in the United States, and may the publishers, who profit by his genius be moved to compensate him for his labor.—R. B., in the Cincinnati Lancet and Clinic.

## NOTES AND QUERIES.

RECOVERY AFTER FORTY-SIX DAYS OF INANI-

TO THE EDITOR OF THE PHILADELPHIA MEDICAL TIMES.

A case is reported in the London Lancet, November 2, 1878, of survival after eleven days of fasting, which, the author states, is the longest period of fasting on record after which recovery took place. In the History of the Royal Academy of Sciences, year 1769, a case is recorded which I report in full, because it is unique in itself, and may perhaps interest some of your

readers. A French soldier, after a tedious and severe illness, was seized with a mental disorder, during which he resolved to starve himself to death; and he continued so firm to his purpose that for the space of forty-six days he did not take even the smallest grain of food. On the fifth day he asked only for some distilled water; and as half a pint of anise seed water was given to him, he used the whole of it in three days. His friends, however, having represented to him that this quantity was too much, he put into each glass of water that he drank no more than three drops, and in this manner his half-pint lasted till the thirty-ninth day. He then gave over drinking, and for the last eight days took nothing at all. After the thirty-sixth day he was obliged to lie in bed; and it is remarkable that this man, extremely clean in other respects, exhaled, during the whole time of his fasting, a very offensive odor, and his griends gave him up as lost, when the voice of nature was suddenly awakened within him by an accident. He saw a child with a piece of bread and butter enter the apartment where he was. This sight excited his appetite so much at once that he begged for some soup. A few spoonfuls of rice-broth were now given him every two hours, some stronger food was gradually added, and his health—though slowly—was in this manner wholly restored. But it is very singular that while he fasted and was weak his frenzy and wild imaginations forsook him, and that he answered when addressed by his usual name, but as soon as he had acquired strength by eating, his whole train of incoherent ideas again returned.

P. G. SKILLERN, M.D.

We note it as a sign of professional progress that the Pennsylvania Hospital has opened its well-furnished pathological laboratory to the general profession. All kinds of pathological examinations will be there made for a moderate fee by the pathologist, Dr. Morris Longstreth.

### OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY FROM DECEMBER 1 TO DECEMBER 14, 1878.

Granted leave of absence for one month, with permission to apply for one month's extension, provided he furnish a substitute at own expense. S. O. 94, Department of the South, December 5, 1878.

Granted leave of absence for one month, with permission to apply for an extension of three months. S. O. 110, Department of the Platte, December 3, 1878.

LAUDERDALE, J. V., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—Granted leave of absence until February 1, 1879. S. O. 262, A. G. O., December 6, 1878.

PAULDING, H. O., FIRST-LIEUTENANT AND ASSISTANT-SUR-GEON.—Assigned to duty as Post-Surgeon at Cheyenne Agency, Dakota Territory. S. O. 140, Department of Dakota, November 25, 1878.

SEMIG, B. G., FIRST-LIEUTENANT AND ASSISTANT-SURGEON. Granted leave of absence for two months. S. O. 260, A. G. O., December 4, 1878.

SKINNER, J. O., FIRST-LIEUTENANT AND ASSISTANT-SUR-GEON.—Assigned to duty at Camp Lowell, Arizona Ter-ritory. S. O. 137, Department of Arizona, November

FINLEY, J. A., FIRST-LIEUTENANT AND ASSISTANT-SUR-GRON.—Granted leave of absence for one month. S. O. 220, Department of the Missouri, December 3, 1878.

De Loffre, A. A., First-Lieutenant and Assistant-Surgeon.—Granted leave of absence for four months. S. O. 260, c. s., A. G. O.

WILCOX, T. E., FIRST-LIEUTENANT AND ASSISTANT-SUR-GEON.—When relieved, to proceed to obey the orders he has received from Headquarters of the Army. S. O. 221, Department of the Missouri, December 6, 1878.

TAYLOR, B. D., FIRST-LIEUTENANT AND ASSISTANT-SUR-GEON.—Assigned to duty at Fort A. Lincoln, Dakota Ter-ritory. S. O. 140, c. s., Department of Dakota.

BARNETT, R., FIRST-LIEUTENANTAND ASSISTANT-SURGEON,
—Leave of absence extended one month. S. O. 99, Division of the Missouri, December 5, 1878.

GARDINER, J. D., FIRST-LIEUTENANT AND ASSISTANT-SUR-GEON.—Assigned to duty at Camp Huachuca, Arizona Territory, as Post-Surgeon. S. O. 137, c. s., A. T.

## PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, JANUARY 4, 1879.

## ORIGINAL LECTURES.

CLINICAL LECTURE
ON SYPHILIS IN RELATION TO
MARRIAGE.

BY DR. ALFRED FOURNIER, Hôpital St.-Louis, Paris.

Notes by Dr. Charles W. Dulles.

ENTLEMEN,—The question, whether a man who has contracted syphilis may marry, is one which is not infrequently asked of a physician, and one which he may not avoid, notwithstanding that it casts upon him the gravest responsibility. If his answer be a positive "No," it is apt to involve for the inquirer celibacy, with irregularities the temptation to which he cannot resist, the deprivation of all that is dear in the idea of family, and many evils which may result from these. If the answer be "Yes," there may ensue equally disastrous consequences. The marriage relation may be the means of communicating to his wife the disease under which he labors; and his children may die before their birth, or come into the world unfit to exist. What can be more terrible than the position of such a man vis-à-vis his wife and children? Remember this, gentlemen, when asked this momentous question.

But, from what I have said, are you to conclude that syphilis is an unsurmountable obstacle to marriage? No, it must not be so considered. This I may say with positiveness, since there have been cases enough to demonstrate its truth; cases where the disease has been communicated to neither wife nor children. I have myself seen fifty-one such, and eighty-two children born and living healthy in spite of the previous disease of their father. When I reflect upon these happy families, I cannot but think what an error I should have committed had I always said an inflexible "No!" to the question whether marriage is permissible after contracting syphilis.

My answer to this question is not "No," but "Yes,"—under certain conditions. It must be well weighed that syphilis is dangerous in three ways: 1st, to the wife; 2d, to the child; 3d, to the family relation.

First, then, syphilis is dangerous to the wife, for she may contract the disease from manifestations recurring after it seems to have subsided, or from secondary lesions upon any part of the body, by means of the multiplicity of contacts and *rapports*, so incessant and intimate, of married life. It is very rarely that under such circumstances a woman escapes contagion from a man with secondary syphilis.

But besides this there is a means of contagion less apparent, less likely to be suspected. A young woman may present manifestations of secondary syphilis and no sign of a primary lesion. The husband, in distress, declares that he himself has had no lesion since he married, that, with your warning against this danger in his mind. he examined himself carefully and constantly, and that he trusted your assurance that all was right. How can this be accounted for? Infallibly in such a case you find that the wife is at that time pregnant, or that she has recently aborted. The syphilis was communicated by conception. Of the way in which this takes place we know absolutely nothing. Of the fact my experience does not permit me to doubt.

In the second place, besides the danger to the wife and even should she escape, syphilis involves the child in danger. The error of teaching that paternal influence is not to be dreaded, is enormous. When it is seen how the father's influence makes itself known in the offspring, in form, shape, height, and tendency to special diseases of body and mind, how can we deny the force of analogy in regard to syphilis?

There are cases, it is true, where the father has not communicated this disease to his child, and enough of them,—as, for example, where a syphilitic man had, at about the same time, a child by his wife, who was syphilitic, and so was the child, and one by his mistress, who was not syphilitic, and her child was sound. A second instance I can quote of a syphilitic man whose child was born healthy and contracted the disease two years later from its father's kisses.

But this concession is only one side of the question. On the other hand, it is a rare occurrence, but true, that a father has begotten a syphilitic child and the mother remained unaffected. Besides which, we must take into consideration the important matter of abortion, which occurs so often

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with no other cause discoverable upon the most searching examination. When such cases come under your notice, where abortion has followed abortion in women apparently healthy, you may suspect, and will usually find, that it is due to the syphilitic influence of the father upon the fœtus.

Thus much of children whose father alone is syphilitic. When both parents are diseased we find that the children die in utero, or are born with syphilis, or with a miserable, weak, cachectic constitution, ready to fall a prey to disease of almost every sort. I can recite you the case of a woman who, having given birth to three healthy children, contracted syphilis from her husband and then had four still-births and three abortions in succession.

The children of the second class, born with syphilis, for the most part do not live long. The disease soon terminates their existence. Those of the third class may show their debility at once, or give no sign, looking well the day of their birth and dying the next, without apparent cause; or they may grow awhile, delicate and feeble, with little power to resist disease, and predisposed to scrofula, idiocy, and convulsions.

In the third place, syphilis is dangerous to the family relation. I am not a preacher, gentlemen; but I speak to you en honnête homme. We may not, in the discharge of our professional duties, overlook the importance, to the state and to mankind, of the social relations. And so I feel that a man with uncured syphilis has contracted a physical debt which he must inevitably pay; and I ask you, Can he marry honestly? Suppose he gets children, and then falls sick and cannot work to support his family. Dare a man risk this? No! he marries uncured, it is an immoral act, an act of injustice to the community. Alas! such things are not uncommon. I know a case of a man who, after marrying and getting children, lost his nose by ulceration, and became an object of disgust to all who knew him, unfitted for his former associations and branded with the consequences of an almost forgotten dis-Another man had a late affection of his eyes, and lost them both, by which his means of support was gone and his family became dependent upon the city. Another, a doctor, impotent from paraplegia, came into the same condition. Another, after a few months of married life, died, leaving his young wife enceinte. Another had cranial exostoses, a cerebral affection, and epilepsy; lost his reason and his money, leaving his wife and children

in poverty.

In view of all this, our bounden duty is to declare to a questioner what may be the consequences of a marriage after the contraction of syphilis. Where there is serious danger of such results as I have named, no man can, no man has the moral right to take a wife and beget children.

But this rule must be most carefully applied; for, as I have said already, we may not invariably refuse our consent to marriage after syphilis has been contracted.

Now, however, we approach grave difficulties, and are confronted with the usual embarrassment of proceeding from theory

to practice.

When and under what conditions, then, is marriage morally permissible to one who has contracted syphilis?

The conditions that are indispensable I

believe to be the following:

1st. Absence of actual manifestations.

2d. Advanced age of the disease.

3d. A period of immunity since the last outbreak.

4th. A non-menacing character of the disease.

5th. Adequate specific treatment.

It might be thought somewhat superfluous to say that no one should marry who has actual manifestations of this disease,—that these constitute an absolutely insurmountable barrier,—and yet I have seen men bold enough to ask the question, and have even seen two cases of marriage with a chancre at the time. Some men act thus from ignorance; some cynically brave all the danger; some, from weakness, fear of exposure and scandal, allow the consummation of a union into which they should by no means enter: but for none is there a reason which can justify them.

The second condition, advanced age of the disease, depends upon the fact that the fresher, the younger the attack of syphilis, the greater is the liability to accident from it. Thus the presence of secondary manifestations constitutes a very formidable danger; and even when they have disappeared they are apt to return. There are certain situations, also, as about the mouth and genitals, where they may be present as simple erosions and deceive a most careful observer. This fact of the decreasing dan-

ger as time goes on is shown in cases where at first a healthy mother has aborted, and later, without her husband's being treated, she has ceased to abort and given birth to healthy children. I knew a mason who, when he married, had a syphilitic roseola. His wife was infected, with the following issue of her pregnancies: in the first she aborted at four months, in the second at five, the third child died before term, the fourth and fifth were born syphilitic, and the sixth, seventh, and eighth showed no sign of the disease.

The precise time when a previously syphilitic person may marry is hard to determine, and must be considered with due estimation of the sort of treatment that has been employed, and its effect; but I may say that I think the minimum time since infection should be three or four years. Before the lapse of three years I will not permit it, as I have seen the saddest results follow such a course. Later the probabilities are better, and with the exercise of proper care the dangers are not great.

The third condition I mentioned was a certain period of immunity since the last outbreak. By this I mean an absolute immunity for a certain length of time. This marks the subsidence of the acute stage, called secondary, and shows the effect of treatment as well as the character of the disease in each case. If these are such as to encourage you, I think—while no invariable period can be set down—that we may consider eighteen months as a minimum, under which I would not myself

sanction marriage.

The fourth condition is a non-menacing character of the disease. This is a most important consideration. When syphilis yields rapidly to treatment, it is a favorable sign; and, conversely, if the form is grave and less tractable, it is more dangerous, and much greater caution must be used. To enumerate some of the characteristics which are grave, I might mention multiformity, multiplicity, or intensity of lesions, a seemingly deep impression upon the general health and stubbornness against Besides this, there are certain treatment. organs, the implication of which is very serious, as the brain and spinal cord; lesions of these being extremely dangerous and apt to recur. I should require a very long period of immunity in such a case. I remember a young man, whose arm had been partially paralyzed, who married in spite of my warning, and in ten days had an attack of paraplegia, followed by insanity

and speedy death in an asylum.

Finally, an indispensable condition is adequate specific treatment. The individual who has contracted syphilis is dangerous, and must be treated. This is the best protection to the community, and needs no argument to support it. Syphilis properly treated rarely progresses to the tertiary stage, while that which is not properly treated almost always does. Treatment diminishes its contagiousness and hereditary transmissibility. Many cases could be cited to illustrate this, where proper treatment of a husband has put a stop to his wife's aborting, and where abortions consequent upon syphilis of both husband and wife have ceased and healthy children been born. It is especially important that at the time of procreation both husband and wife should be under treatment. know a case where a syphilitic woman, who had aborted seven times, went under treatment, and gave birth in the eighth pregnancy to a healthy child, and then to another in the ninth. She now omitted treatment, and her tenth pregnancy resulted in a syphilitic child that died in six months. Returning to treatment, she became pregnant again and had a healthy

Adequate treatment, therefore, is a capital and essential condition to marriage of

a syphilitic.

I have thus, gentlemen, laid down what I think are the conditions upon which one who has contracted syphilis may marry. It is not an invariable programme, but simply the result of my personal observation, and what may, indeed, be modified in the light of subsequent information. With these considerations in my mind, when the question we have been studying is presented to me, I feel sometimes quite sure of my ground, and speak out positively and at once. At other times I do what you will doubtless have to do, wait and observe; in doing which, I likewise explain the case to my patient, and impress him with the importance of being as careful as possible in a matter so grave, and which is at best a calculation of probabilities. On one side there is danger which cannot be overestimated, on the other comparative health, safety, and happiness.

If, then, we deal thus honestly and conscientiously with those who seek our advice in this serious matter, with due caution against the ills which may result from an unwise permission, and appreciation of the unhappiness which may follow an unnecessary refusal, we shall execute an office salutary to the state and of the greatest benefit to our fellow-men.

## ORIGINAL COMMUNICATIONS.

NITRITE OF AMYL AND MORPHIA IN THE CONVULSIONS OF VERY YOUNG CHILDREN.

BY HUGO ENGEL, M.D., Lecturer on Electro-Therapeutics at Jefferson Medical College.

H AVING resided now for about twelve years in a district of Philadelphia where the population consists mainly of Germans, the procreativeness of whom is well known and perhaps due to the fact that they do not employ the modern means for the destruction of the young life before it leaves the uterus, I of necessity have frequently been called in cases of idiopathic convulsions in young children. I call them idiopathic if I find no apparent cause, except perhaps teething, for them, and do not include under this head those convulsions which so often usher in certain exanthematous and other febrile diseases (from errors in diet and worms, for instance) in the young. I generally got along right well with a warm bath, followed by diaphoretics, external stimulations, morphia, and bromide of potassium, to which I during the last few years added hydrate of chloral. Whenever these proved not sufficient, the inhalation of chloroform was resorted to; and in a few cases I gave a hypodermic injection of quinine, but dropped this remedy soon, as utterly useless for the purpose for which it was wanted.

Three consecutive cases, that notwithstanding all my exertions died, determined me to try at the next opportunity a somewhat different treatment, after my usual procedure had proved a fruitless one. Since that time four more cases have come under my observation. The first yielded rapidly to the old treatment; but of the following three, two, and especially the last one, were of such a stubborn character and so near the fatal end that my former way of managing them would have undoubtedly led to none but a deplorable result. The fourth, or rather the third, case was some time ago a mild attack of the last one. The treatment I employed in the two bad cases was so eminently and so at once successful that I feel it my duty to report it, either to elicit other reports or to stimulate further trials. I shall give the history of only the worst one, as it differs in no essential point from the other, and was saved by the same treatment which I had, as well as perhaps every physician, employed in adults, but never before in children under two years of age.

About two months ago I was called by Mr. R., an intelligent German tailor, living near Fifth and Callowhill Streets, to come to his child, then about sixteen months old, as it was suffering from convulsions. I was at the time occupied with hunting for an artery in a scalp-wound, and gave Mr. R. the necessary directions and prescriptions, to follow out my former treatment, promising to be there as soon as possible. When I reached his house, half an hour later, the child was asleep and well, the convulsions either having yielded to the treatment, especially the chloral, or ceased of their own accord. While there, I made an examination of the child, and inquired into the history of the case and family. No cause was to be found,-no error in diet, no worms, but a slight fall, so slight that it might have acted as an exciting, but surely not without a predisposing cause. The mother's side gave a neuropathic history, and Mr. R. told me that he had lost so far three children by convulsions, and that they all had died in their second attack. The first one was always a mild one, as the one this child had, but the second happened some months later and was the severe and fatal one. Calling again the next day, and finding the child totally well, I examined it yet more carefully. There was no bump on the skull, no sign of a depressed bone, no heart-lesion, no teething, no albumen in urine; nothing whatsoever, except a very long prepuce, which I advised the father to have circumcised. He assented, but postponed the operation, for reasons of his own, till near Christmas. This ended the affair at that time.

About one week ago, on arriving home from my morning visits, about half-past twelve o'clock P.M., I found an order for me to come as soon as possible to Mr. R.'s. I went right away, and found the same child, now eighteen months old, again in convulsions, which had begun at about half-past eleven o'clock A.M. But this time the convulsions were really horrid, and presented the worst form I ever had met with in children. They seemed to be exactly symmetrical, and no muscle of the whole body was unaffected. There was foam before the child's mouth; it had bitten its

tongue; the thumbs were flexed, and the teeth inseparable. The face, lips, gums, and the whole surface of the body looked pale, and a clammy perspiration, or rather dew, was distributed all over. The pupils were both evenly and so dilated that only the smallest imaginable ring of the iris was visible, and they were turned upwards. The father again gave me the history of a slight fall in the morning, and told me that the child had seemed to be teething, of which I, though, could detect no evidence.

From the time I saw the child first until half-past five o'clock P.M., I tried all the means above mentioned. I called there about every hour, and up to the last-named time there had been about half an ounce of chloral and a little more bromide of potassium injected into its rectum. Chloroform had been tried twice, each time as long as appeared safe; the convulsions had seemed to cease for that time, but only to return with increased vigor. The father told me "that he considered further efforts useless; the case was exactly like those of the other three children, and he knew that there was no hope," etc. I now explained to him that I would try yet another remedy, but that its application was dangerous, or, at least, not for such young children exactly determined yet, and that the child possibly might die during its application; but that all hope was gone if something could not be done speedily. He gladly assented, and I sent for my friend Dr. Mason McCollin, to assist me.

The child had then the appearance as if every minute would be its last,—deadly pale, the breathing being heard only occasionally and in a sort of spasmodic way, and the pulse evidently slowly but steadily becoming more irregular and weaker. Knowing that only a heroic treatment would do good, I proceeded

as follows:

I injected into the subcutaneous tissue of the inner forearm one-fourth of a grain of morphia, and directly afterwards dropped five drops of nitrite of amyl on a handkerchief, applied it to the child's nose, and let it inhale, watching pulse, breathing, pupil, and general appearance in the mean time. After about thirty seconds, violent agitation set in; the convulsions became more spasmodic in character; then the face first, and afterwards the whole surface, assumed a purple hue; the child took one long, deep breath, and in not quite two minutes was deep asleep, breathing regular, pulse full and regular, though somewhat rapid, and ten minutes later the pupils were contracted.

My idea in adopting this treatment was the same as has led me and others to its use in adults. Whenever there is decided paleness of the whole surface in an individual affected with convulsions, showing an almost tetanic contraction of the arterioles,

I apply the nitrite of amyl. According to Wood,\*-whose work I would recommend especially to young practitioners, who have listened, perhaps, only to old-fashioned lectures on "opium, one of the very best hypnotics, etc., we have, given in the dose of so and so, the following preparations being officinal," and who wish to leave the old beaten track of this deplorable "materia medica reciting," and conform their treatment to our somewhat advanced knowledge on other points,—the action of nitrite of amyl is a peripheric one; therefore, by employing it, we get suddenly a filling of the arterioles with blood; the whole circulation and the blood-pressure are at once altered, and so is the condition which produced the spasm at the base of the brain. I remember, when about four years ago assistant in the clinic of that great teacher of medicine. Professor Da Costa, when he made the first experiment at the Jefferson College in a case of epilepsy with nitrite of amyl, how rapidly the ghastly white appearance of the affected individual changed to the deepest blush.

The morphia I added for several reasons. The dilated pupils and paleness of surface were an indication for me, and in my first case, when I applied nitrite of amyl in so young a child, the convulsions, after having ceased, returned, and only on the second application of the amyl, with the addition of a hypodermic of gr. one-sixth of morphia, sleep followed, which lasted only one hour, when the convulsions once more, but in a mild degree, returned, to cease then forever. This time I took, therefore, at once one-fourth of a grain. Another reason for using morphia was its usefulness in convulsions of sunstroke, and in cutting short, or even preventing, the cold stage of

febris intermittens.

The child slept for about eight hours. Nearly two hours after the cessation of the convulsions the pupils were very much contracted, and there existed a rattling in the throat, and the respiration was in such a condition that the latter seemed to me midway between stertorous breathing and the tracheal death-rattle. The skin was still flushed, but no perspiration or blotched appearance visible. To be on the safe side, I injected gr. ½ of atropia as an antidote to the morphia. Half an hour later, when Dr. McCollin saw the case for me,

<sup>\*</sup> A Treatise on Therapeutics, by H. C. Wood, Jr. Philadelphia, Lippincott & Co.

about 11 P.M., the child was breathing

quietly.

Except some slight fever and great dryness in throat, evinced by continuous thirst for nearly twenty-four hours, and by the frequent putting of its fingers deeply into the mouth, the child made a rapid progress to recovery, and was discharged by me a few days later. As the convulsions were at least epileptoid, and might return, I ordered gr. x of bromide of sodium, to be taken three times daily, intending to continue this treatment for a year or so, with slight alterations in the form of the bromides.

310 NORTH FIFTH STREET.

REMARKS ON A CASE IN WHICH THE NECESSITY FOR TRACHE-OTOMY WAS AVERTED BY THE SYSTEMATIC ACTION OF IN-TENSE COLD EXCITING FORCI-BLE INSPIRATION.

BY M. O'HARA, M.D.,

Read before the Philadelphia County Medical Society, November 27, 1878.

THE remarks about to follow have been suggested by the progress of a case of acute laryngitis in a young child in which the recovery was effected by the persistent local application externally of intense cold, and from a condition which is ordinarily considered to demand the prompt performance of tracheotomy.

Paul M., 2 years old, was the fourth of a consecutive number of cases of scarlatina in the same family. He was attacked on January 4, 1878, with fibrinous discharge from the nostrils, becoming subsequently purulent. The entire throat was swollen, but free from deposit and unaccompanied with tumefaction of the cervical glands. Nasal respiration was obstructed, except when relieved by the frequent injection of solution of common salt and Labarraque's solution. This impediment continued an entire week, after which there was some discharge, but without serious embarrassment to nasal respiration.

On the 13th he was much improved, and permitted to leave his room to play in the parlor. At mid-day I found him with the first symptoms of acute laryngitis, as denoted by hoarseness, cough, tenderness on pressure over larynx, and fever. He was remanded to bed, counter-irritation with turpentine, hot fomentations, lime inhalations, and steam from boiling kettle in the room ordered. He was placed on calomel and bicarbonate of soda. If croupy symptoms supervened strongly,

he was to be freely vomited every three hours. The nose was still systematically freed from accumulation of secretion by the use of injections.

He was kept in tolerable condition in this manner, no untoward symptom manifesting itself, until the next evening, 14th, when the syringing of the nose produced reflex spasm of the larynx (none of the fluid gaining access to the mouth), and it was given up.

From this time larryngeal respiration became embarrassed, and was getting worse and worse, until stridor occurred with each inspiration, and supra-sternal and infra-thoracic recession set in. He showed some signs of exhaustion, from insufficient oxygenation of the blood, apparently, rather than from accumulation of noxious matters in the blood.

15th, II P.M., Dr. Cohen saw the child with me; and it was considered by him, from the age of the child, and the fact that it was convalescing from scarlatina, and the persistence of nasal discharge, that tracheotomy held out but little hope of success, though otherwise it was strongly indicated by the physical symptoms

In this opinion I could not concur, as it seemed to me the child was still vigorous. But, in the absence of circulatory obstructions or paroxysmal asphyxia, and the vigor of the child not being severely impaired, I thought it had presented nearly the same condition for some hours, that it was better to wait. condition of the child showed stupor, from which he could be easily aroused. Inspiration was performed with very violent exertion of the accessory muscles of respiration, with marked recession of the intercostal spaces as well as the supra-sternal and infra-thoracic soft tissues; expiration being unimpeded, it was believed that these symptoms might possibly be due to paralysis of the muscles that dilate the glottis, rather than, to actual tumefaction of the tissues, which would be more likely to impede expiration.

Acting on this supposition, it was determined to test the effect of local applications of icecloths to the neck and throat. In order to see it properly applied, I remained with the patient the entire night. Two large blocks of ice being procured, several strips of muslin were placed between them. The centre was ap-plied to the neck, in front, crossed behind, and each end carried forward to the ear and front of ear. They were applied at intervals of two minutes, or less at first, until eight o'clock the next morning. Each application of the icecloth was followed by a forcible inspiration, distending the chest more and more fully at each repetition, until in the course of eight hours the inspirations were unaccompanied by any stridor and with but little recession of the soft tissues. Each application roused him from the stupor more and more, until at eight o'clock the resort to tracheotomy was considered out of the question. Then the application was continued, at longer intervals of ten minutes, for twenty-four hours longer, for the abatement of the laryngitis. The case pursued the ordinary course of a mild catarrhal laryngitis, without further dyspnæa, but with some congestion of the lungs. The attendance upon the patient ceased in a few days. He has since remained well.

The points to which I would wish to call the attention of the members of the Society are the obstruction of the nares as the primary phenomenon, the supposed paralysis of the posterior crico-arytenoid muscle, and the manifest action of the ice-cloths in producing an artificial inspiration.

Nasal stenosis is known to be productive of asthma by reflex action inducing bronchial spasm. If spasm can be produced, then why not paralysis? Was the paralysis in this instance, if it existed, produced by reflex action upon that portion of the respiratory centre of the brain controlling the posterior crico-arytenoid? If the paralysis was due to the infiltration of the muscular tissue, it could not have been overcome by the reflex action of the cold shock externally, for the effect was immediate and temporary. The stupor looked towards some brain disturbance, and this—whether from congestion, anæmia, or the circulation of depraved nutrient fluid—might have caused irritation of the brain centres for respiration. The amount of laryngeal obstruction due to the inflammation was, in my opinion, very slight. Possibly the paralysis might have been due to the inflammation causing direct irritation of the nerve. This was the view entertained by Dr. Cohen.

With regard to the action of the ice, I would earnestly call attention to it as a therapeutic measure, thus applied, as in all human judgment it saved the child's life. The child felt the beneficial effects of it at once, and, though somewhat unpleasantly shocked with it at first, rather desired it. It certainly appeared to re-establish the normal rhythm of respiration. I think the plan of placing the strips between large blocks an admirable one. I have not known of this having been suggested previously, and it occurred to me on the moment. In each instance, as the cloth touched the region of the ears the inspiratory effort followed. This may have been from reflex action of the facial from its posterior auricular branch, or from the action of the auricular branch of the pneumogastric in the external meatus; the laryngeal muscles being supplied by other branches of this great nerve.

# PRESSURE FOR THE CURE OF HYDROCELE.

BY WM. R. D. BLACKWOOD, M.D.

DRESSURE applied in a variety of methods has for a long time been employed as a curative agent in diseases of the scrotum and its contents. This plan of treatment has been enthusiastically recommended in affections of the testicle. the afferent and efferent vessels, and in those of the coats forming the scrotum. notably in the case of the tunica vaginalis. Experience has, however, led surgeons to adopt other devices, as being more readily managed, more reliable, quicker in action, and more stable in result. Many drawbacks prevent pressure from receiving that attention which it possibly deserves. As usually attained, compression of the scrotum is irregular and spasmodic in its action. As and when applied by the surgeon, it is probably equable, firm, and endurable, but in a short time after his departure the appliance (whatever its nature may be) usually becomes loose or uncomfortable, and therefore fails in attaining the essential object, -continuous pressure properly applied. This single defect has led to the almost total abandonment of the measure. this as in many other problems, the trouble does not inherently belong to the thing itself, but lies in our inability to properly avail ourselves of its valuable qualities, to use it to advantage.

During the war, hydrocele, varicocele, and orchitis were of common occurrence, especially in the case of cavalry or the mounted officers of infantry,—the "horsecritters," as they were known to the people at large of the country through which we might be passing. From inability readily retain applications whilst on the march, I usually confined the dressing by adhesive strips surrounding the scrotum, as in the ordinary strapping in swelled testicle, or by attaching them to the suprapubic and perineal regions. The loosening of plaster straps as already referred to becoming a nuisance, I early in the war discarded them in favor of the suspensory bag, holding it up by elastic webbing or bands (frequently made from suspenders, or

"gallusses," as the men termed them), the whole supported by a belt or strap around the loins, which, in addition, held up a perineal band, the object of which was to prevent the bag from slipping away from under the scrotum. Finding decided advantage to result from the elastic support thus afforded, I added pressure to the affected parts through strapping of the same material, and with marked benefit in the affections spoken of. Since the war, I have treated a number of cases of hydrocele in this manner, using strong elastic webbing formed into a bag, and in several instances a cure has resulted without operation. In all my cases which are operated on by tapping and the injection of Lugol's solution, I employ pressure at once by this method, to insure complete coaptation of the tunica vaginalis, that the cavity may be obliterated. Surgeons differ as to the necessity or advisability of securing adhesion of the tunica vaginalis to this extent, but I always desire it, am satisfied with my results, and see no indication for a change.

In the cases cured without an operation the pressure was maintained constantly for several months (four to ten); and I regard the case narrated by Dr. Baldwin in the Times of October 26 as unique, and the slight duration of pressure obtained by scrotal contraction through the action of cold salt water, an hour or so daily, for not over a month, would indicate the case to have been a mild one. I have found that where any patency of the inguinal canal existed, pressure failed in relieving the condition, the secretion passing into the cavity of the peritoneum, whence it was absorbed. It would thus appear that the tunica vaginalis must sustain pressure from within, and that to be effectual it must be firm and long-continued. I have repeatedly tried cold produced by ice or refrigerating mixtures, simple or medicated, but they invariably failed, as has strapping by adhesive or other plaster. The elastic and therefore comfortable pressure obtained as I have indicated is, I am sure, a valuable addition to our armament: it is easily applied, requires little supervision, and is inexpensive. Whilst the great majority of cases demand operation, no harm can result from a trial of such pressure, especially in the incipient stage. My attention having been called to this subject through Dr. Baldwin's article, I suggest this method of

applying pressure, should such be desired. Although the use of elastic webbing for the bag and retaining-straps grew up with me during the vicissitudes of field - service which my division encountered in campaigns from the Atlantic to the Mississippi and back again, I do not claim any originality for it, as, although new to myself and the gentlemen of the medical staff associated with me at the time, with this as with many other plans in medicine, good, bad, and indifferent, "there is nothing new under the sun."

246 NORTH TWENTIETH STREET.

TRAUMATIC TETANUS—BROMIDE OF POTASSIUM AND CHLORAL —CURE.

BY A. K. MINICH, M.D.

MRS. F., act. 23, after paring a corn on outer surface of little toe until bleeding occurred, attended a ball, dancing until beyond midnight. The following day she complained of stiffness and shooting pains in legs and back. In the evening I was called, and found I had a case of tetanus. The jaws were locked, but yielded slightly when the handle of a large spoon was inserted between the teeth and turned. Speech was gone, opisthotonos well marked. I ordered the toe to be poulticed until thoroughly cleaned, after which morphia was sprinkled upon the wound. Thirty grains of chloral, at intervals of three hours, and fifteen grains of bromide of potassium, every hour and a half, were ordered. The next day she had improved. The chloral was dropped, and the bromide given every two hours, the following or third day every four hours, when, the symptoms having gone, she was placed under a tonic.

Remarks.—I report this case for two reasons: 1st, it is of interest to know from what slight causes tetanic symptoms may develop; 2d, the undoubted efficacy of bromide of potassium. The "corn-knife" should be more generally recommended. It consists of but one blade, with the cutting portion of the point convex,-an epitomized bowie,—so that the corn can be cut or shaved out without the risk of wounding the flesh, as is done so often with a straight-bladed knife. With the old knife, too, the operator on self sits in a crouched and twisted position, at once awkward and, I may say, undignified. This is obviated by the use of the cornknife, which permits the operation to be accomplished not only safely, but gracefully.

## NOTES OF HOSPITAL PRACTICE.

### NEW YORK HOSPITAL.

CLINIC OF DR. L. DUNCAN BULKLEY.

Reported for the Philadelphia Medical Times.

CASE I.—ALOPECIA AREATA, ECZEMA, AND VITILIGO OCCURRING IN THE SAME INDIVIDUAL.

HROUGH the kindness of Dr. Fewsmith I am enabled to present to you in our first case a patient who is a perfect pathological treasure-house from a dermatological point of view, because he has a number of different skin-diseases associated together on his person. It is a useful case. for the reason that it gives me an opportunity of impressing upon you that you ought to be prepared to recognize not infrequently a number of different diseases of the skin as existing at the same time in the same individual. Because a patient has syphilis, for instance, it is no reason that he may not also be the subject of affections of the skin which are entirely independent of that; and when another one is troubled with eczema, perchance, we should not be surprised to discover that he has some other variety of skin-disease in addition.

In the present instance we find no less

than four distinct affections.

The first and most striking of these is alopecia areata. On the right temporal region is a patch of baldness about an inch in diameter, as you notice, perfectly distinct and well marked, of a smooth and marble-like whiteness, and in the different plates which I now pass around you will see the disease well illustrated in its various degrees of severity.

The second is *canities*. Running from the patch of alopecia you will perceive a streak of clearly-defined and localized gray-

ness of the hair.

The third is eczema, and this is found to be located back of the ear on the same side of the head on which the alopecia and canities occur. The patch is covered with little scales; and therefore the affection is to be classified as eczema squamosum.

The fourth is *vitiligo*, a skin-manifestation which is so rare that I may not have the opportunity of showing you another case of it during the whole of our course.

Now, three of these distinct affections are undoubtedly connected with each other, and are all of neurotic origin, viz., the alopecia, the canities, and the vitiligo.

Alonecia areata is always to be classed as a neurosis, and, what is a remarkable feature of the disease, it usually occurs in a very sudden manner. In the present instance the patient woke up only a few mornings ago and found this bald spot where the hair had been as luxuriant as on any other part of the head the night before. Indeed, the recent origin of the patch of alopecia is here very evident to any one who is accustomed to see much of the affection. As to the canities, the patient is only thirty years of age, and we must also look to some nervous derangement for the explanation of this premature localized grayness. Such a streak of canities you will not infrequently see along the line of a neuralgia, so that a track of grayness thus sometimes becomes a useful guide for the localization of neuralgic trouble. Again, the leucoderma or vitiligo is a neurosis as well as the others. It is found most marked here on the backs of the hands, but it exists on other portions of the body also. If you will examine it carefully, you will observe that there are numerous patches of skin, irregular as regards size and shape, of a dead white; the appearance being due to an absorption of the pigment of the part which has followed upon a hyper-pigmentation in the same location.

The eczema, you observe, is red in color, as well as scaly; and it would require no little care in diagnosis to distinguish it from the psoriasis of the scalp which I

showed you last week.

To return for a moment to the alopecia. I would call your attention particularly to the fact that the surface of the bald spot is perfectly smooth, and contains no stubbed hairs as in the case of tinea tonsurans or ringworm of the head. Usually there are no hairs at all; but if there are any present they are, as in this case, downy in character, That the affection is a neurosis is shown by the fact that it occurs in those whose nervous systems have become depreciated by too much smoking or from any other cause of such derangement or exhaustion. In the treatment, therefore, the improvement of the general health and tonics directed particularly to the nervous system form an important element. Locally, one word characterizes the treatment, and that is stimulation. Anything that stimulates the scalp will be of service; and for this purpose I know of nothing better than cantharides. In some instances it is even advisable to blister the entire surface of the baldness, not for the sake of destroying any parasite (for in alopecia areata, you must always bear in mind, there is no parasite whatever), but merely for its stimulating effect upon the hair-follicles. Any further remarks in regard to the leucoderma I must defer until another occasion.

#### CASE II.—SERPIGINOUS, ULCERATING, TUBER-CULAR SYPHILIDE.

This young man has on his left forearm near the elbow a large sore, to which I merely wish to call your attention for a moment in order that hereafter you may always be able to recognize similar ones at once. It is a typical case of serpiginous, ulcerating, tubercular syphiloderm, and the appearances are so perfectly characteristic that I do not care to ask a single question in regard to the history. The lesion here present is all-sufficient. The essential characters of it are the ulcerating, crustcovered edges of this somewhat circular patch of about two inches diameter, which. as you observe, can clearly be seen to be composed of separate tubercular masses. The centre is cleared, with a rather superficial scar. Such a syphilide as this is one of the later manifestations of the disease, occurring along towards the tertiary period, and may be met with at any time between the second and eighth year after infection. For its successful treatment the iodide of potassium alone is not sufficient: it requires the continued use of mercury also.

### CASES III. AND IV.-LUPUS VULGARIS.

The two women whom I now show you are suffering from lupus vulgaris, which, you must clearly understand, has no connection with syphilis whatever. The first case is a very marked and inveterate one, the patient being now 45 years of age, and when she speaks you observe that her voice is reduced to a whisper. This is because the larynx has become affected by the disorder; and it is the case which Dr. Lefferts described in a late number of the American Journal of the Medical Sciences, under the heading "Lupus of the Larynx," The disease commenced over thirty years ago, in a small patch upon the nose, and gradually extended until it has involved the entire face and resulted in causing the revolting aspect which the patient now presents. During these years every conceivable treatment has been tried in her case, such as that by calomel, arsenic, etc. She has been bled sixty-four times, has made use of iodine locally for years, and, in short, has tried every method and therapeutical agent that has ever been recommended by anybody. For some time past she has been taking phosphorus internally under my direction, and, it would seem, with more or less benefit. Certainly the disease appears to be checked, and the elements of it of a less succulent character

than formerly.

You see how very extensive the disease is in this case, reaching from behind one ear to behind the other, and from down on the neck below the chin up into the scalp beyond the forehead; notice, also, the marked and characteristic contractions from ulceration and loss of tissue (notably about the alæ of the nose) which it has produced. The initial and any subsequent new manifestation is always in the form of separate tubercles, and it is to the border of the affected area that we must look for the elementary lesion whenever a case presents itself. The characteristic points about these tubercles are that they are distinct from each other, of a purplish red, not much elevated above the surface, and they are pulpy to the touch, feeling very much like putty would under a membrane, much softer than the masses in syphilis or epithelioma. Here, you notice, is a large mass of such tubercles near the right ear; and if we were to examine their structure under the microscope we should find that it consisted of a small-celled growth occupying the whole thickness of the skin. This cell-infiltration really takes the place of natural elements of the latter, and hence it is that there is always marked cicatrization when healing takes place. The scales on the surface of superficial lupus vulgaris are very peculiar, and are shown very characteristically in this case. You see they are not abundant, but a large share of the surface is covered with thin, pellicular scales, attached quite firmly at one edge, or, rather, which are free only at one edge and attached over most of their surface.

In lupus the affected tissue is very soft and breaks down very easily; and this is the reason why Hebra's famous treatment has been so successful in a large number of instances. His method is to bore thoroughly in every direction into the lupous masses with a stick of nitrate of silver, and in this way the disease can be thoroughly

eradicated when it is confined to small areas. There is no danger of doing injury to the healthy tissues, because the nitrate of silver cannot possibly penetrate them with its comparatively dull point. I have frequently resorted to this plan with great success, making use of Squibb's stick nitrate of silver, and sometimes grubbing and digging with it, as it were, over the whole surface, in order to thoroughly break down and destroy all the soft lupous ma-This is, of course, an extremely painful operation, and it is necessary to etherize the patient first, as well as to administer morphia for a short time after it. Besides the nitrate of silver boring, Hebra is in the habit of employing this instrument which I hold in my hand, which he calls a spoon-gouge, for the purpose of clearing away the diseased tissue.

Again, we have Volkmann's and Squire's methods of multiple puncture or scarifications with the knife at our command, and when I was in Paris during the past summer I saw this practised with the most wonderful results. The knife used is one made expressly for the purpose, and with it the lupous area is cut through in different directions, thus giving rise to an inflammatory process which results in healthy cicatrization.

Without alluding to the various other plans which have been tried in the treatment of lupus, I will only recur for a moment to that by phosphorus. some time past this patient has been on the use of Ashburton Thompson's solution of phosphorus, and has, I believe, received considerable benefit from it. This, you must remember, is an exceedingly bad case, and, in view of the previous steady progression of the disease in spite of all measures adopted for its relief, we ought to feel grateful for any improvement what-One evidence of improvement is the present smoothness of all the surface of the cheek, which formerly felt rough and nodulated to the touch.

The other patient with lupus is a female, forty-two years old, in whom the disease has lasted but nine months as yet. Here, you perceive, it is located upon the right cheek, and is of a very superficial form; but here you perceive the same purplish, pulpy tubercles as around the margin in the preceding case. It is not, however, lupus erythematosus, of which I showed you an example last week, although that

also is quite superficial, and does not result in drawing of the face, such as was seen in the first case. This patient has also been taking Ashburton Thompson's solution (the dose used being twenty drops three times a day), and the disease is now much less marked than it was before she commenced its use. In case it shows any tendency to spread in the future, I should promptly resort to scooping out the affected tissue, in addition to the internal use of phosphorus.

### CASE V.-PSORIASIS.

Next I will ask you to look for a moment at this boy, suffering from general psoriasis, whom I showed you a week ago. very marked case, the whole body being covered with the eruption. It is, as you remember, a perfectly distinct affection from chronic eczema, which some portions of it resemble greatly, and particularly in this, that here and there over the surface are to be found the round, red spots, with white, micaceous scales upon them. on the arms the eruption resembles that shown in the colored plates, but on the body the disease involves all the surfaces, as also on the scalp, and viewing these regions alone it would be difficult to distinguish between scaly eczema and

The books say very little about such treatment of psoriasis as I am in the habit of employing; but, as I have been led to regard the disease as a constitutional affection, analogous in some respects to gout, I depend almost altogether upon internal medication and very strict attention to the diet. This patient has been taking fifteen grains of acetate of potassa in a bitter infusion three times a day, after meals, and already begins to show signs of improvement.

### CASE VI.-TUBERCULAR SYPHILIDE OF LEG.

This woman has also been presented to you before, and I only introduce her again to-day to show the results of two weeks' treatment, and for the purpose of exhibiting the case to those who were absent on the former occasion, and also that those of you who saw it before may have the appearances here present fixed in your minds in such a way that you may never forget them. This affection of the leg you should be able to recognize as syphilitic without asking a single question;

and in this connection some of you will, perhaps, recall Hebra's advice, never to listen to patients' accounts of themselves, because they always lie. Here is an ulceration which is perfectly characteristic of the tubercular syphilide, and it ought never to be mistaken for anything else. A large share of the surface of the right leg is covered with an ulcerating lesion, which is seen to be composed of separate masses of infiltration, grouped together. The edges of each ulceration are sharply defined, but are not hard and everted, as in varicose ulceration; moreover, in the latter you never see so many small ulcerations, and seldom will you find them extending so high up on the leg. Also here on the knee are cicatrices of a former eruption of a similar character, also on the chin. The leg was very painful two weeks ago, and the odor from it very fetid. The patient has been just two weeks on the "mixed treatment," and even thus early has been greatly improved. No local treatment whatever has been employed.

(To be continued.)

## TRANSLATIONS.

ENEMATA OF CHLORAL IN SICK HEAD-ACHE. - Dr. J. Seure (Bull. Gén. de Thérap., 1878, p. 365) recommends this treatment very highly. He says that a patient of his, a lady, who is subject to severe attacks of migraine after shopping, etc., is accustomed, on her return home, to take an enema consisting of a glass of warm water, with a tablespoonful of the following mixture: R chloral, gr. xlv; aq. destillat., f3x.-M. She then reclines upon a sofa, with closed eyes. Within a few seconds she begins to taste the chloral in her mouth, and at the same time she experiences a sensation of numbness. Little by little the headache disappears, nausea is allayed, and half an hour later nothing remains but a slight discomfort in the head, with a little torpor.

Within an hour and a half this lady finds herself able to sit down to dinner, and by the time the meal is over she has forgotten all about her headache and is able to entertain visitors during the evening. In this case twenty grains of the chloral are enough, but in the case of men thirty to forty grains are required. Dr. Seure has noticed that

the relief gained is more prompt if a tablespoonful of brandy or whisky is added to the enema. The enema has one disadvantage: that is, the slight burning pain which it causes in the rectum. This may be avoided by the use of a glass of warm milk instead of water, or better by beating up the volk of an egg in the water. In the case of individuals who retain enemata only with difficulty, a smaller amount may be injected, and a drop or two of laudanum may be added. Dr. Seure regards this treatment as almost infallible for the arrest of an attack of sick headache, and as decidedly preferable to the administration of remedies by the mouth. It has the advantage of not disturbing the stomach. Chloral also acts very promptly, its absorption by the rectum being almost instantaneous, as is proved by the effects on the general system, and also by the exhalation of chloroform by the lungs within a few seconds after the enema has been taken.

ANATOMY OF THE SYPHILITIC PAPULE. -At a recent meeting of the Société de Biologie (Le Mouvement Méd., 1878, October 19) M. V. Cornil read a paper on this subject, giving the results of microscopic sections of these lesions. The fragments examined were taken from the cadaver. According to Cornil, the skin in the neighborhood of the papules is slightly raised. Sometimes the epidermis is thickened, at other times it has desquamated and the upper layers of cells are wanting. rete is slightly thinned. The vessels are gorged with blood. The connective tissue of the papillary layer is normal. Around the capillary vessels, however, the "lymphatic cellules" are observed in considerable number in the peripheric connective tissue. In the deeper layers of connective tissue, around the tubes and lobules of the sudoriparous glands and the vessels of the dermis, all the vessels are surrounded by a zone of greater or less width, composed of "lymphatic cellules" which have escaped from the vessels and have accumulated along their course, pushing out the fasciculi of connective tissue. Islands of cellules are also observed around the ves-The fasciculi of connective tissue have not been invaded by the "lymphatic cellules." The diapedesis and migrations of white corpuscles have therefore been very limited, circumscribed, in fact, about the blood-vessels. The pathological modification here has evidently been very slight;

it has not involved the "fixed cellules" of the connective tissue; it has not modified the appearance of the fasciculi of connective tissue, and it has only permitted the diapedesis and escape of the white corpuscles in the immediate neighborhood of the Though not severe, however, this pathological condition penetrated deeply, even to the panniculus adiposus. The ecchymotic or pigmentary color of the papules in process of cure is due to the fact that certain red globules have escaped from the vessels at the same time as the white ones. The coloring-matter of these red globules impregnates the tissue of the papillæ and gives the dusky hue to the erup-Gradually this coloring-matter is passed on to the rete, where it gives the pigmentation to the lesion. This pigmentation lasts until the granules of coloringmatter are gradually brought to the surface and eliminated. In the larger papules there is something more than a simple inflammation of the papillæ and the superficial layers of the corium; all the dermis, and together with it the subcutaneous cellular and adipose tissue, is inflamed in the same manner. In the dermis, in fact, the fibrillæ of the connective tissue are separated by round cells ranged in series, or by fixed, tumefied cells; more deeply the adipose cells of the subcutaneous cellular tissue are inflamed, each adipose vesicle is surrounded by a circular arrangement of lymphatic cellules, and the fat is resorbed; the islands of fat-globules are transformed into islands of embryonic connective tissue where the fat has disappeared. In most of the preparations of the cutaneous papules some are seen which tend to separate from the mucous layer. In some sections a clear space exists between the summit of the papillæ and the vault or cover formed by the mucous layer. During life these spaces are filled with blood, forming a sort of ecchymosis and giving the coppery color to the eruption. These sanguineous effusions are a manifestation of the deglobulization of the blood in syphilis which permits its passage through the enlarged capillaries already modified in their walls by the inflammatory process.

ACUTE CARBOLIC ACID POISONING—RE-COVERY.—Oberst (*Cbl. f. Chir.*; from *Berlin. Klin. Wochens.*, 1878, No. 12) was called to see a man who three minutes previously had swallowed five ounces of a five per cent. watery solution of carbolic acid. The

patient was unconscious: a cold sweat over the face; the jaw tightly clenched. Oberst opened the œsophagus, passed the stomachsound without difficulty, and emptied the stomach of some four ounces of its contents, which smelled strongly of carbolic Several pints of water were then introduced, the stomach washed out, and the patient rapidly recovered. The urine was colored brown for one day, while a catarrh of the bladder from which the patient had suffered improved greatly under the influence of the carbolic acid. (Here is a hint for the treatment of vesical catarrh which deserves to be followed out.-TRANS.)

CARBOLIC ACID IN THE TREATMENT OF WHOOPING-COUGH. — Dr. Ed. Thorner (Deutsches Archiv f. Klin. Med., Bd. 22, 1878, p. 314) counsels the employment of a one to two per cent. solution of carbolic acid in the form of vapor. It may be used in an ordinary inhalation apparatus, or in cases of young children a larger quantity may be atomized in a closed room several times a day and the little patient permitted to breathe the atmosphere.

Counting the Milk-Corpuscles in the Analysis of Human Milk.—E. Bouchut (Annales de Gynécologie, 1877, p. 453; from Cbl. f. Med., 1878, p. 572) estimates, on the basis of the examination of 158 nurses, the numbers of "milk-cells" at 200,000 to 5,000,000. Cow's milk contains 1,102,000 per cubic millimetre, with a specific gravity of 1022 and 24 grammes of butter per 1000 grammes. When the proportion is 3,700,000 "milk-cells" the specific gravity is 1030, the proportion of butter 34 grammes.

DERMOID CYST IN THE FLOOR OF THE MOUTH.—Guetterbock (Cbl. f. Chir., No. 43, 1878; from Arch. f. Klin. Chir.) reports the case of a man 26 years of age, in whom a tumor of the floor of the mouth had grown for a year, until it hindered speaking, chewing, swallowing, and even breathing.

The tumor, which was the size of a hen's egg, fluctuated decidedly and was sharply defined. It was at first taken for a ranula, and an incision was made into it without result. It was then removed from the mouth without the patient having inhaled ether. The tumor was found to include a broth-like contents, together with a number of crumpled hairs, and was in fact a regular dermoid cyst.

# PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, JANUARY 4, 1879.

## EDITORIAL.

A GREAT NEED SUPPLIED.

A MOST important new journalistic enterprise, just announced by Leypoldt, of New York, is the *Index Medicus*.

"This journal will record the titles of all new publications in medicine, surgery, and the collateral branches received during the preceding month. These will be classed under subject-headings, and will be followed by the titles of valuable original articles upon the same subject, found, during the like period, in medical journals and transactions of medical societies. The periodicals thus indexed will comprise all current medical journals and transactions of value so far as they can be obtained. At the close of each yearly volume a double index of authors and subjects will be added, forming a complete bibliography of medicine for the preceding year. It is not at present intended to index journals devoted to the subjects of chemistry, pharmacy, veterinary medicine, and dentistry, but the editors will select from them articles which have a bearing upon pathology or therapeutics. In the description of new books received, the size. price, illustrations, place of publication, and publisher's name will be accurately given."

Of course the value of such a journal as the *Index Medicus* depends upon the facilities and the abilities at the command of its editors. When we say that Dr. Billings is to be in charge, and his Washington assistant, Dr. Fletcher, is to be assistant editor, that the trained cataloguers with the exchanges and journals of the National Medical Library are to furnish the material, we say enough to show that the *Index Medicus* will be a necessity to every specialist, to every author, to every teacher, and to every thorough student of the profession. All of the medical journals of the world, with perhaps two or three out-of-the-way

exceptions, are to be so indexed that the index rerum will disappear from the medical professor's or student's table, and, instead of each man working by the rushlight whose strands have been gathered laboriously by himself, there will be the one central electric globe which shall thoroughly illuminate the darkest recesses of current medical literature.

Again, if Congress ever publishes the subject-catalogue of the National Library, the forthcoming journal will be its perpetual supplement, and whoever employs one as a guide to the past will never do without the other as a leader for the present.

X/E do not know that ever in the history of this journal have we felt called upon to say a word of criticism concerning any foreign medical or scientific appoint-There are but few men and but ment. few positions whose labors or history has broadened their possession until they belong not to one country but to the world. Under the direction of Burdon-Sanderson, the Brown Institute for Animals in London has rapidly achieved such universal reputation, and has come to be looked upon as one of the very few places in Anglo-Saxon lands where medical scientific work, other than clinical, is steadily produced in quantity and quality alike most excellent.

In this institution, appointments are made by the Senate of the London University, and, Burdon-Sanderson having resigned, they have selected, not Dr. Klein, his former assistant, whose multiplied labors we all know, but Dr. Greenfield, of whom few of us have ever before heard. By natural succession, by distinguished reputation, by devotion to pathological research, and by acknowledged ability, Dr. Klein was entitled to the appointment, whilst as an active practitioner and hospital physician Dr. Greenfield may have deserved and acquired local reputation and practice, but nothing more.





No wonder the British Medical Fournal reproaches the Senate of the London University for their stupidity or favoritism, and predicts the sinking of the Brown Institute into insignificance. Certainly the grave seigniors have done a fourfold injury to medical science, in discouraging scientific work everywhere by making the younger physicians feel that the most faithful and the ablest of scientific research will not insure a good scientific appointment, in injuring the institution under their care, in injuring and perhaps extinguishing one first-class scientific worker, and in curtailing the progress of medical science in England

## CORRESPONDENCE.

### LONDON LETTER.

E are in the midst of an old-fashioned English winter, and realizing the effects of cold upon the organism generally, and upon the air-passages in particular. Even in London the streets are white and the railings rhimy. It is rarely that we see anything like hoar-frost here for several mornings consecutively; but Jack Frost has got a grip upon us this time that just indicates what his grip can be. Consequently, we see an immense amount of bronchitis in all its forms. Acute bronchitis in babies, who generally offer little resistance to this infant-destroyer. Poor little things! It moves one's compassion to see them plaintively wailing in charge of a mite of an older sister, a very few inches taller and not so very many pounds heavier than themselves; or hanging over the side of a perambulator, while their custodian is deeply interested in the barter of some sweets and utterly forgetful of their comfort or discomfort. The use of the turbinated bones, and the question of residual air in the lungs, are subjects of which they are as ignorant as an old English peasant was of why the window-tax was substituted for hearth-money, all unconscious of the industrious historian who was not yet in embryo, but who, when he did come, let everybody know all about it. The genesis of bronchitis is now a simple study. These unfortunate children, crying and moaning, breathe almost exclusively through their mouths, and so do not benefit by the arrangements in their noses for warming the inspired air when it takes its normal and proper course. What betwixt the swollen nasal membrane limiting the calibre of the nasal air-passages, and the ready entrance offered by the open mouth, the poor little bodies are industriously courting death. Nor are their efforts unsuccessful. Myriads of them will never see Candlemas day, especially in the cotton, coal, and iron districts, where the operatives in thousands are lying idle. After the prosperous years of high wages, over-hours, and over-production, they are meeting with reverses which entail terrible suffering; and, as if the unavoidable misery were not enough for them, they have been striking, in the face of falling markets and short hours. The drop of warm milk, sweetened with treacle, which might maintain a flagging heart and a failing respiration, can no longer be procured by famishing parents, and the fire is out on the hearths of thousands of homes where, until very recently, the sounds of the piano and the harmonicon were regularly heard. Want in winter is indeed a terrible thing, and our hospitals are full, very inconveniently full, all of them. But for these perishing babes there are no hospitals, and, alas, no comforts. The tiny structure, begotten of physically weak parents, scarcely suckled, but fed on tea and pap, readily succumbs to the onslaught of bronchitis. It is a stern thing, this weeding out of the imperfect organisms, this slaughter of the innocents, that the race may profit, and a grim lesson that is being taught by cold and disease.

But by this time the reader will be wondering what has become of the original subject and the residual air. Even after the fullest expiration a certain amount of air remains within the thorax at or near the temperature of the body. When air is respired through the nostrils it is heated by the warm plates of the turbinated bones, with their rich vascular supply over them in their mucous membrane. But these poor children crying and moaning breathe almost exclusively by the mouth, and but little by the nostrils, which are more or less plugged with mucus, that the little custodians are not watchful in removing. Consequently they inspire the cold air, and the residual air in the lungs becomes persistently chilled, and then hyperæmia of the bronchial lining membrane follows, and runs on into inflammation. The struggle for life is very brief with these ill-nourished infants; the respiratory centre cannot carry on a long fight, the bronchiæ become choked with phlegm, which the organism is unequal to removing, and then the life flickers out. It is, unfortunately, quite impossible to see how such disease is to be prevented, at least in the present state of our knowledge. As to treatment, it must be as energetic as circumstances will permit; and I am inclined to think that the effects of temperature on the centres of the circulation and the respiration are not sufficiently attended to. The effect of a low temperature is to lessen the activity of these two centres; while heat stimulates them. Consequently, when the body-temperature falls, these centres

are partially paralyzed, and the advantage to be derived from hot drinks and the jacket poultice are obvious. They greatly aid the action of direct stimulants to those centres, as ammonia, strychnia, belladonna, The efficacy of these means was well illustrated in a case where the writer was called in consultation lately. A lady, who was liable to attacks of asthma, was severely ill with bronchitis. Her pulse was 150, and respirations 40 per minute. The respiratory act being labored, the face was dusky, the temperature 102°, though the perspiration was profuse. The only scintilla of hope lay in the fact that the right ventricle might have been trained by the attacks of asthma to stand a long strain. Ammonia and strychnia with spirits of chloroform were given, whisky with milk ordered freely, and the chest was encased in linseed meal poultices. She rallied, and made an excellent if scarcely hoped-for recovery.

It is perhaps desirable to follow the maladies associated with the season, as their frequency then gives their discussion more interest for the reader. Assuming the reader's concurrence in this view, it may not be out of place to review the effects—or some of them—of cold upon the elderly, and especially its effects upon their vascular system. In hot weather the cutaneous vessels are dilated, the surface is warm, the sudoriparous glands are active, and the cooling effect of the evaporation of the perspiration is added to the heatloss from the dilated vessels. On the other hand, in cold weather the skin is dry, perspiration is excited with difficulty: it is also cold, white, and bloodless. The blood is now driven away from the external, or heat-losing area of Rosenthal, to the interior, or heat-producing area. The heat-loss is thus economized, while its production is increased. By such arrangements is the body-heat regulated in hot and cold external temperatures. These beautiful adjustments, however, are not entirely without risks and dangers of their own. The vascular system is taxed sometimes to make the adjustments; and especially is this the case with those persons who have entered upon the vascular changes associated with chronic renal disease or gout. Here there are hypertrophy of the muscular wall of the peripheral arterioles, a high arterial tension, and a hypertrophied left ventricle. The effect of cold is to contract the cutaneous arterioles, which, in their entirety, contain a large mass of blood; and not only that, but the more internal arteries of the limbs feel the effect, and the hands become blanched, bloodless, and deadly cold, from the spasm in the smaller arteries. Such spasm raises the blood-pressure in the arteries, and from this spring several pathological sequences. The heart may become embarrassed, or the arteries may suffer.

When cold weather comes on quickly, the newspapers contain accounts of a number of sudden deaths, especially in people advanced

in years. Heart-failure and apoplexy are the causes of sudden death, while respiratory diseases do not usually kill in less than two or three days, unless it be pulmonary con-gestion or apoplexy, which Rokitansky held was a common cause of rapid death. Hearttroubles manifest themselves in the form of angina pectoris and heart-failure in diastole. The sudden rise of blood-pressure offers an obstruction to the onward flow of the blood, and then one of two things follows: the heart contracts more vigorously,—even palpitating in its efforts to force forward the blood, -or it is unequal to doing so, and becomes acutely distended. Sudden distention of the heart is a not uncommon cause of death occurring suddenly. Here the heart-muscle is paralyzed by the distention, and is found, at the autopsy, flaccid in diastole. This serious result is most common in those who are the subjects of degeneration of the heart-walls. So long as the muscular tissue is in its integrity the heartwalls struggle away, palpitation and irregularity testifying to the strain put upon them; but when their structural integrity is impaired, and especially when their nutrition is inter-fered with by atheroma of the coronary vessels, then any acute taxation is badly borne. The history of the deaths from angina pectoris is very instructive. In all-even in Arnold of Rugby, who died in his first attackthere are evidences of disease of the muscular walls. In the case of John Hunter, the great anatomist, there was a history of anginal attacks for twenty years preceding his death; and when at last the final attack came, it was found that the coronary arteries were converted into bony canals. Nothnägel tells of a case of angina pectoris brought on by travel in a post-wagon in very cold weather, and adds the term vaso-motor to this form of angina. When, then, there is a structural degeneration either in the heart-walls or in the arterial tunics, the rise of blood-pressure in the arteries becomes a grave source of danger. If the heart still remains powerful, the risk of arterial rupture is greatly increased. Where the heart is undergoing decay, and so is weakened, the risk of apoplexy is lessened, but that of heart-failure is proportionately increased. Even invalids confined to their rooms feel the changes of external temperature, in their vascular system if not consciously, and are not safe from the bane-ful effects thereof. The great importance of warm clothing for the aged, and especially those whose kidneys and vascular system are involved in general degenerative changes, cannot be overestimated, and the most scrupulous attention to this matter is desirable on the part of their medical attendants.

As if it were not enough to provide us with incessant changes from snow to thaw, the thermometer never rising many degrees above the freezing-point, we have been favored with persisting fogs. The sun has been visible,

faintly glimmering at us, twice the last fortnight, but, apparently seeing no encouragement, has veiled himself again, after the momentary peep. We have realized lately that this is a land of fogs and mist, and strangers tarrying with us must have had vivid impressions of the weather, and ceased to wonder why it is such a steady theme and conversation-topic with the Britisher. What with the weather, the state of trade, the eccentricities of the present government, dominated by a being of Oriental descent, and the general depression, it is eminently creditable to us that the number of suicides is not materially increased.

The question of the effects of spasmodic contraction of the arteries and arterioles of the extremities, especially in connection with cold weather, presents itself in an interesting aspect in relation to sleeplessness. It is now widely known that a condition of cerebral anæmia is essential to sleep, and that if the arterial vascularity of the brain is kept up sleep is out of the question. If, then, the extremities be cold, sleep cannot be successfully wooed. An old theological writer, when weary with long writing, kept sleep at bay by immersing his feet in cold water: by so driving the blood to the head he could continue his labors: whether they were worth much after such expedients may be open to question. With many women cold feet are their bane; they are miserable when awake, and they can scarcely get to sleep. If they can get their feet warm, then they can sleep, but not otherwise. But how to get their feet warm is the question with them. Hot bottles to their feet are but partially effective, and often are a complete failure. Now, Dr. George Johnson has pointed out that with the dry imperspirable skin of certain persons with chronic Bright's disease, perspiration cannot be in-duced by warm baths. But if the person be first wrapped in a cold pack, so as to drive the cutaneous arterioles into spasmodic contraction, subsequent paralysis readily follows on the patient being placed in a warm bath; the vessels become thoroughly dilated, and then perspiration follows. The spasmodic contraction is essential and necessary to the consequential dilatation; and the same holds good of the cold feet of women. Tight boots prevent the free flow of arterial blood through the feet during the day, and the subsequent dilatation which follows with some persons does not occur with others. Indeed, it would seem that the anæmia caused by the pressure remains, and the feet are stone cold. Putting them to the fire gives temporary warmth, and so does the hot bottle in bed, so long as it remains itself hot; but as it cools the feet again become cold, and sleep cannot be wooed successfully.

What should be done is to dip the feet momentarily into cold water and then have them well rubbed with hair gloves or a rough towel

until they glow. This seems a very unattractive plan to many minds; but it is just the story of the snowballer's hands. At first the contact of the snow makes the fingers very cold; but perseverance is rewarded by a glow which may become almost a burning heat; the primary contraction of the vessels is followed by secondary dilatation. This is what we will accomplish by the immersion. for a brief period only, of the feet in the cold water, followed by friction. By such means the cold feet become warm, and after this a hot bottle to the feet will keep them warm effectually. With my patients at the hospital the complaint of bad nights now evokes the question, "Are your feet cold?" And the answer very commonly is, "Oh, dreadful!"
And it will be found that all narcotics, draughts, pills, or lozenges are futile to procure sleep as long as the condition of the feet is not attended to. Subject the feet to appropriate treatment, and then the sleepingdraught will be successful and attain the end for which it is administered. Macnish said of sleep, "Sleep which shuns the light embraces darkness, and they lie down together most lovingly under the sceptre of midnight." Very true; but cold feet will upset the whole arrangement very thoroughly.

J. MILNER FOTHERGILL.

## PROCEEDINGS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF PHILA-DELPHIA.

THURSDAY EVENING, OCTOBER 24, 1878.

THE PRESIDENT, DR. H. LENOX HODGE, in the chair.

(Continued from page 141.)

Kidney from a case of phthisis, showing dilatation of the pelvis and calyxes, and supposed secondary tubercular deposits. Presented by Dr. Louis Starr.

S., æt. 29, a sailor, died in my ward at the Episcopal Hospital, on October 12, from catarrhal phthisis. Several months before coming under my care he had suffered with cystitis, for which disease he had been treated in the surgical ward of the hospital.

When admitted to the medical ward he presented all the ordinary rational symptoms and physical signs of advanced phthisis. His urine was examined, though there were no symptoms directing attention particularly to the kidneys or bladder, and found to be of low specific gravity, 1012, and to contain a small amount of albumen. The autopsy was made nine hours after death. On opening the thoracic cavity the lungs were found to be bound to the chest-walls by numerous pleuritic adhesions. The upper lobes of both lungs contained large cavities, while the remainder

of the pulmonary tissue was infiltrated with caseous material. The heart was normal in size, its muscular tissue was pale and somewhat flaccid, and one leaflet of each of the semilunar valves was fenestrated. The liver was large and fatty. The kidneys were quite different in appearance. The left was slightly enlarged, and presented the gross characteristics of the "large white kidney." The right was also larger than normal, and had a lobulated appearance externally; on section this lobulation was found to be due to saccular dilatation of the pelvis and calvxes, the various sacs being filled with a turbid, urinous fluid. and having thick walls. The largest sac. nearly an inch in diameter, was situated in the lower part of the kidney, and approached very near the external surface, leaving only a thin layer of condensed leather-like renal tissue. The glandular structure of the rest of the kidney was not reduced in thickness, but was much firmer than normal, felt rough to the finger, and was studded with little nodules. which to the unaided eye appeared to be collections of miliary tubercles. In removing the kidney the ureter was torn off a short distance from the organ; the tube in this position was moderately dilated, and its wall was thickened and friable. The mucous membrane of the bladder was thickened and rough and was covered with tenacious mucus; on the peritoneal surface a large number of small nodules, about as large as split peas, were observed. Similar nodules were also found on the intestinal peritoneum.

Report of the Committee on Morbid Growths. -" A microscopical examination of a section of the kidney presented by Dr. Starr shows the glandular part of the organ to be very much altered; the tubules are to a great extent deprived of their cells, and surrounded by fibrillar connective tissue in a state of pro-liferation. The capsules of the Malpighian bodies present a similar arrangement of structure. The miliary nodules scattered throughout the organ consist of a central granular mass, the periphery of lymphoid cells, in a stroma of delicate, reticulated fibrous tissue. The organ exhibits the lesion of acute tuber-

culosis.

"The new formations situated in the peritoneum covering the bladder are composed of elements similar to those found in the nodules of the kidney, and have a like arrangement. "November 14, 1878."

Gelatinous arthritis of knee. Presented by Dr. H. LENOX HODGE for Dr. JOHN ASHHURST,

Jr.
The specimen presented is the lower extremity of the femur, articulating surface of the tibia, and patella, from a patient whose thigh had been amputated the day before by Dr. John Ashhurst, Jr., at the Children's Hospital. The case was one of arthritis in a child of ten years, the subject of hereditary syphilis, who had been under treatment in the hos-

nital for more than eighteen months. first incision had been made as if for excision of the knee, but, the bone disease having been found too extensive to justify this operation, anterior and posterior flaps were cut, and the thigh amputated at its lower third. The specimen showed very well the characteristic gelatiniform change in the synovial and cartilaginous tissues, while the bone was markedly carious.

November 20.—The flaps united by adhesion, and in ten days, the ligature having come away, the patient was looked upon as Uninterrupted recovery folconvalescent.

lowed the operation.

Primary cancer of the intra-thoracic glands. By Dr. WILLIAM PEPPER.

The patient, a blacksmith, æt. 40, was admitted to the Philadelphia Hospital suffering with large pleural effusion on left side, extreme dyspnœa, husky whispering voice, and slight dysphagia. The history was obscure. It appeared that for two years there had been occasional dysphagia and increasing huskiness of voice. For past three months there had been increasing dyspnæa. On careful examination, the physical signs of pressure on right bronchus were detected, and some hard and enlarged lymphatic glands were found in left supraclavicular space.

The diagnosis was made of primary cancer of intra-thoracic glands, pressing on right bronchus, œsophagus, trachea, and azygos vein. Death occurred suddenly from syn-

The autopsy revealed cancerous disease of the glands in both anterior and posterior mediastinum, forming masses of considerable size. The right bronchus was compressed. The œsophagus and descending thoracic aorta were partly imbedded in the cancerous growth. The azygos and hemiazygos veins were involved, and so imbedded that it was impossible to dissect them out. Large pleural

effusion existed in the left side. Report of the Committee on Morbid Growths. -" The specimen of intra-thoracic new formation presented by Dr. Pepper, and referred to the Committee on Morbid Growths, is found, by microscopic examination, to consist of a fibrous tissue stroma arranged so as to form alveolar spaces, in which spaces are seen epithelial cells. This arrangement of structure is characteristic of carcinoma-variety scirrhus. The enlarged glands from the neck have undergone a similar metamorphosis, as shown by microscopic examination.

"November 14, 1878."

PROFESSOR GORUP-BESANEZ died in Erlangen on November 24, in his sixty-third year. He was well known as the author of a large manual of Physiological Chemistry and of other writings on the same subject.

### PHILADELPHIA COUNTY MEDICAL SOCIETY.

CONVERSATIONAL meeting was held at the hall of the College of Physicians. Philadelphia, November 27, 1878, Dr. J. Solis Cohen, Vice-President of the Society, in the

### The question of tracheotomy for laryngeal paralysis.—Relief of asphyxia by ice.

Dr. M. O'Hara made some remarks upon a case in which the necessity for tracheotomy was averted by the systematic application of intense cold, in a child suffering with acute

laryngitis. (See page 150.)

Dr. R. A. Cleemann referred to a case of capillary bronchitis in which anæsthesia of the nerve-centres was set up by the retention of carbonic acid in the blood, on account of the difficulty in getting air into the lung. The case was given up by the physician in charge, but the application of ice to the skin stimulated respiration, produced better aeration of the blood, and the child recovered.

Dr. O'Hara said that the urgency of the symptoms must be taken into consideration as one of the indications for tracheotomy. Although in the case reported the suprasternal and infra-thoracic soft tissues sank in with each effort at inspiration, showing impediment, there was no obstruction to expiration, and the blood received a fair quantity of oxygen, there were none of the signs of suffocation such as we see in capillary bronchitis, and there was no time when the blood was so deficient in oxygen as to require an operation. One of the great difficulties in regard to tracheotomy is the need of exact indications for the time of its performance; and the case was reported as a contribution to this subject.

Dr. Nancrede agreed with the lecturer, and stated that where the difficulty in breathing only comes on at intervals and in paroxysms, tracheotomy is not indicated; but where there is manifestly less air rushing into the chest, and the obstacle to its ingress becomes permanent, if the state of the child otherwise warranted the operation, he thought that such cases are just the ones for tracheotomy, which should not be deferred until the child is ex-

Dr. W. R. D. Blackwood said that the subject of tracheotomy is always one of great interest, but probably there is no other operation in surgery about which more diverse views of its utility have been expressed. One explanation of such a doubt may be found in the fact, as suggested by Dr. Nancrede, that it is generally performed too late. He had had two cases of tracheotomy in this city, and had assisted in several others. The importance of early operation is not sufficiently dwelt upon, and it should be brought more prominently before the profession. Physicians are inclined to

wait until all other resources have been tried and failed. In his first case, one of membranous croup, he had fully determined to operate as soon as symptoms of suffocation came on. but the family then objected, because the child looked so well: when he got manifestly worse they consented, but it was too late. He was satisfied that if performed earlier it would have been successful; the child lived only a few minutes after the operation. The second case recovered after tracheotomy.

The application of cold in this connection is new, but the fact of its stimulating power in other cases is well known. In chloroformnarcosis, a piece of ice in the rectum will produce inspiration after breathing has stopped. and ice in the vagina will produce reflex con-

tractions of the uterus.

Probably the case reported would have recovered under other treatment as well. There could not have been a closure of the glottis; for in that event, if there was no room for it. no amount of stimulation would have allowed the air to get past. If the trachea were closed, the application of the cold would have done

but little good.

Dr. O'Hara believed the trouble to be due to paralysis of the muscles that dilate the glottis. The application of cold overcame this, just as water thrown on the face of a new-born child causes deep inspiration.

Dr. Nancrede said that if there were actual paralysis of the glottis, strong inspirations would increase the dyspnœa, by sucking in the valve-like cords, while gentle breathing would not disturb them. On the other hand, complete paralysis would not be relieved by

the application of cold.

Dr. O'Hara said that Dr. Chapman in his writings on the effects of the application of ice to the spine, which he had seen since writing his paper, also refers to the use of ice in croup and other diseases. The result in his case must have been due to the reflex action of the cold upon the brain. There is no doubt that this case recovered without a severe operation, and that an operation might have been the cause of his death. More precise rules for tracheotomy should be formulated from the teachings of experience.

Dr. Nancrede, having operated upon a number of cases, spoke from experience, in saying that paroxysmal dyspnœa was not an indication for operation so much as permanent

laryngeal obstruction.

The Chairman had seen this case, which was a very interesting one, and believed it to be just the kind that had been referred to by Dr. Nancrede. There was no obstruction to expiration, but the stridor kept getting worse and worse. He had seen the same in adults, and Niemeyer speaks of seeing it in children, and considers it part of the history of croup. In adults there is nothing to be done but tracheotomy, which must be performed sooner or later, or the patient will perish.

The child he had been called in to see in consultation by Dr. O'Hara was suffering from the difficulty described, but as it was in apparent good condition, although just recovering from scarlet fever, he hesitated to recommend tracheotomy. Immediately upon the application of the ice to the neck, he took a deep inspiration. This artificial respiration was kept up for more than thirty hours, as mentioned, there being no deposit in the larynx and no obstruction to expiration.

He had another case in an adult recently in the same condition, but ice had no effect. Many of those cases where death from croup has occurred without deposit in the larynx are precisely like the present, and due to paralysis of the dilator muscles of the glottis. The device of putting the cloths between two blocks of ice is a good one, as it keeps them

cold all the time.

In reply to a question from Dr. O'Hara, he stated that he never had had the courage to use electricity in this form of paralysis, for ear of exciting spasm of the glottis and killing the patient.

Compound fracture of anatomical neck of humerus. Presented by Dr. C. B. NANCREDE.

This specimen, and the case from which it was removed, have seemed of such unusual interest as to induce me to offer them for your consideration this evening. Similar injuries, or rather injuries requiring similar treatment, are not unusual in military practice, but are very rarely met with elsewhere. I will first show the specimen, next describe the injury, and then exhibit the results, after which I will explain my reasons for the course pursued. The portion which I hold in my hand is, as you see, the upper four and a quarter inches of the diaphysis of the left humerus, completely stripped of all muscular attachments and periosteum, except at its posterior aspect, where a triangular slip remains, a portion of it being very thin, evidently consisting of only a few of the deeper layers. This portion is the upper epiphysis, the line of fracture passing through the epiphyseal line except at one or two points. The shaft is slightly split, while the shell of bone connected with the head is fissured at various portions of its circumference, as if the shaft had been impacted, thus wedging it apart. Further description of the specimen is involved in the description of the case, which I will now proceed to give.

The patient, J. McC., a boy aged 14 years, fell from a tree some twenty-five feet upon his elbow, on the afternoon of Sunday, September 23, 1878, landing on the ground, striking in his fall against the limbs of the tree, and sustained the following injuries in addition to those just now detailed. The broken shaft was driven through the skin covering the lower portion of the deltoid muscle on its anterior aspect, tearing in its course the fol-The insertion of the deltoid lowing parts. was completely stripped off with the subja-

cent periosteum: the coraco-brachial, teres major, and latissimus dorsi were in like manner torn off, the latter carrying with them the posterior lip of the bicipital groove. The tendon of the pectoralis major was torn off about half an inch from its insertion, and one if not both heads of the biceps were ruptured. In consequence the head and neck of the bone. deprived of periosteum, merely hung sus-pended from the glenoid cavity by its cap-sular ligament and the rotator muscles. The upper end of the lower fragment must have almost grazed the brachial artery, its point of emergence through the skin being not more than about three-fourths of an inch from its course. As you see, the patient now, about ten weeks since his injury, has a surprising amount of movement in his new joint. Seven weeks after the operation he removed his coat, vest, and shirt without assistance. He can readily put his hand to his mouth, behind his back, and on his ear. He enjoys perfect use of his forearm, but of course has lost nearly all power of lifting the arm from the side. of these motions are unattended with pain. Although four and a half inches by actual measurement of the bone have been removed. the actual shortening only amounts to a scant inch and a half, the new joint having formed

apparently on the third rib.

The course of treatment pursued, and my reasons for deciding upon it, seem worthy of detail, since such injuries are but seldom seen. and, as far as I can discover, no clear rules have been laid down for their treatment. To the members of this Society who devote themselves especially to surgery I need hardly say that no question of amputation arose in my mind; but to those in pure medical practice I would say that when the main vessels and nerves of a limb remain intact, the injury to the soft parts having been produced by the bone itself, not the fracturing force, almost any degree of shattering of the bones may be recovered from in the young without opera-Two lines of treatment then offered for consideration, viz., the simple return of the bone, closure of the skin-wound, drainage, and trusting the case to nature, or the resection of the injured bone. Theoretically the first would have seemed the better course. promising no shortening of the limb, and the retention, in a measure, of the power of the deltoid. In reality, however, the chances of union were not one in a thousand, and if not union then necrosis with its consequent shortening; necrosis, too, meaning months or years of inflammation and suppuration, matting the muscles together so that when recovery occurred-almost necessarily by an operation-the usefulness of the limb would be but slight. Resection, on the other hand, offered the complete removal of all injured portions of bone, and with them the most important factors of trouble after such an injury, thus permitting rapid healing, and the

least possible inflammatory adhesions of the muscles, tendons, etc. If the bone had been simply returned, the risk to life would have been greater, owing to the prolonged suppuration incident upon the separation of the necrosed bone and deep-seated abscesses so common after compound fractures. Against it was the absolute shortening of the arm, with the prospective cessation of growth due to the removal of one of the humeral epiphy-

The actual result. I think, bears me out in the course of treatment pursued, for I hardly think that he would be here in as good condition, with the wound soundly healed, if I had followed what is often, but falsely, called the "conservative plan" of treatment. I believe that true conservatism indicated exactly what I did. The amount of shortening would not have been much less had the case been left to nature and necrosis. Had this occurred, union of the severed head could hardly have taken place; and then the same shortening would have obtained as surely as if the epiphysis had been removed. Army experience has shown that when a portion of the upper end of the humerus is removed for injury, nothing is gained by leaving the uninjured head, since it necroses. Although not cognizant of this fact of experience at the time of operation, anatomical knowledge, general surgical principles, and experience induced me to arrive at a conclusion by a priori reasoning which I have since found that extended experience had already proved. I believe, therefore, that theoretically and from experience, resection ought to be performed for such injuries. It is hardly necessary to say anything about the operation itself, since each case must be a rule for itself, the only point being to remove the bones with as little additional damage to the soft parts as practicable. The wound was dressed antiseptically, and when I transferred the wards to my colleague, Dr. Packard, no suppuration had occurred, and there was not the slightest inflammatory blush about the wound. He did uninterruptedly well, and the wound was soundly healed in less than seven weeks, the greater part at a much earlier date, however.

Dr. Charles T. Hunter believed that there had been positive reproduction of the bone. The shaft extends to lower margin of glenoid cavity, and he recognized the insertion of the pectoral and latissimus dorsi muscles. If the bone had been restored to its place, he believed that the periosteum would have regained its attachment; there is no doubt that the head ought to have been removed, as its nourishment by the anterior circumflex artery

Dr. Nancrede said that the idea of saving the bone had occurred to him, but he had adopted what seemed at the time of the accident to offer the best results, in view of the possibility of necrosis.

Treatment of fractures of humerus.

Dr. R. J. Levis said that the case had been well treated, and the result was excellent. He had for a long time considered the ordinary routine treatment of fractures of the humerus in the vicinity of the shoulder as very unsatisfactory. The displacement ordinarily is of the upper fragment outwards. Representing, by a diagram, a fracture in the upper third, we find that the arm is shortened by the overlapping of the fragments. This shortening is easily overcome by carrying the elbow out from the body and making extension,-that is, bringing the lower fragment in a line with the upper one, which is tilted outwards. Keeping the fragments in this relation suggests the principle of treatment. In a case of this kind, recently, the patient had been treated only by the postural method,lying in bed with his arm at right angles to his body. Surgeons are too apt to cover up such fractures with a cap and splints.

In the case of a colored woman, he had obtained good apposition by placing the hand upon the opposite shoulder, and in another case the forearm had to be placed behind the back. He had, for a number of years, discarded splints in treating fractures of the upper extremity of the humerus.

In these cases the displacement is due to the direction of the fracture, but there is no uniformity in the line of fracture or displacement. Each case is a rule for itself in the indications for treatment. His observation had led him to believe that fractures of the upper extremity of the humerus should be treated without splints by the postural treatment, using adhesive plaster to keep the arm across the body in the most favorable position; and possibly a pad may be needed in the axilla. By this means he was confident that better results can be obtained than by the usual practice.

> FRANK WOODBURY, M.D., Reporting Secretary.

## REVIEWS AND BOOK NOTICES.

CLINICAL DIAGNOSIS: A HAND-BOOK FOR STUDENTS AND PRACTITIONERS OF MEDI-CINE. Edited by James Finlayson, M.D., etc. Pp. 546. Philadelphia, Henry C. Lea,

The title of Dr. Finlayson's convenient little book seems to invite criticism at the very threshold of acquaintance with it. Many kinds of diagnosis are known to us: surgical diagnosis and medical diagnosis are familiar terms: differential diagnosis and diagnosis by exclusion puzzled us more in our student days—and do yet, in truth—than did the rule of three at a remoter period. Do we not concern ourselves daily with the diagnosis of tumors, of fractures, of pregnancy, of maladies of the blood, of the nervous system, of mental states?

Is not diagnosis, variously qualified as it may be, so intimately bound up with the daily work of every practitioner of physic that without it there would be no proper work at all for him to do? And is not all this clinical diagnosis? The title would have had appropriateness etymologically if the work had been restricted to the consideration of the diseases that keep the patient in his bed, or, on the other hand, in the technical sense of "clinical," if its contents had included the widest ranges of diagnosis in morbid states of every kind. A better name for the book as it stands would have been "Medical Diagnosis," had that not been preemoted.

But this fault-finding is with the book's

name, not with its nature.

The editor has been his most generous and at the same time his best contributor, by far the greater part of the work being written by his hand. His co-workers, though few in number, have, however, done excellent work in contributing to the completeness of the hand-book as a whole and in securing its accuracy in the several departments.

The opening chapter, on the Physiognomy of Disease, by Professor Gairdner, is written in his most attractive vein. It abounds in practical information, and in that happy quality so often wanting in medical literature,—

suggestiveness.

The chapters on Case-Taking and the Disorders of the Various Systems, by Dr. Finlayson, are evidently the result of much faithful work in arranging and condensing. That the clinical knowledge here laid before the reader has been collected and verified by long habitual daily work in actual contact with the sick is evident upon every page.

The chapters on Insanity, and those upon the Symptoms of Diseases of the Male and Female Generative Organs, though less closely related to clinical medicine than the others, are of a practical character, and are made to fit into the general plan of the book in a most

admirable manner.

The long chapter on the Physical Examination of the Chest and Abdomen is based chiefly upon the work of Professor Gairdner

and the teachings of Dr. Gee.

Finally, we have a concise explanation of the manner of conducting *post-mortem* investigations in hospitals and in private dwellings, and a very brief description of some modes of preserving specimens for future examination.

There are eighty-five well-drawn cuts, mostly accredited to the source from which they were obtained. Errors in the proof are rare, as befits a book re-printed by "Collins, Printer." We noticed, however, a phrase repeated (pp. 336, 337), and Glasserian instead of Gasserian (p. 162). There is a copious index. The book is an excellent one,—clear, concise, convenient, practical. It is replete with the very knowledge that the student needs when he quits the lecture-room and the laboratory

for the ward and sick-room, and does not lack in information that will meet the wants of experienced and older men. J. C. W.

## GLEANINGS FROM EXCHANGES.

ON THE NATURE OF THE SPECIFIC POISONS OF THE ZYMOTIC AND SEPTIC DISEASES (*The Lancet*, November 23, 1878).—Dr. Reginald Southey, in a lecture on hygiene, makes the following interesting generalizations concerning the ultimate nature of various organic contagia:

From facts recorded of infection and poisoning by communicable disease, it is reasonable to believe that different animal contagia have different atomic forms, different atomic weights, distinct vitalities, resist destruction differently; are some direct or immediate, some indirect or intermediary in their course from their starting- to their sticking-point, from their discharge from the first infected individual to their arrest in the wounded person. Let us inquire into all these matters.

For communicable disease to spread, three things are requisite: (1) an infecting poison, an animal cell or graft, some germ or microspore, or some potential fluid; (2) some means of connection or insertion of this poison; (3) receptivity or aptitude in the person who re-

ceives this poison.

If the atomic form of the poison is large, it may be believed to be heavy; the larger, the heavier, and more tangible it is, the less readily will it travel from person to person. The contagiousness of the disease communicated will therefore appear immediate or most direct: those nearest in contact with the infected person will suffer most. If, although heavy, its vitality is great, it may be conveyed about by clothes or fomites. If its vitality is small and it is quickly destroyed by diffusion through air or water, it will not travel far, and must be inserted quickly in a fresh body to provoke its special reaction.

There is much reason to think that the plague poison, syphilis poison, the smallpox and typhus poison, is of this heavy form and low vitality. But the poison of cholera and typhoid fever is probably an example of a lighter, subtler substance, and one of greater vitality; since, although sometimes carried into the body by food or water contaminated by human alvine excreta, the cholera poison is probably also borne in the blue mists observed in most cholera epidemics; and neither the cholera nor the typhoid poison appears to be destructible, although diluted in any quantity of cold water. The syphilis poison probably quickly loses its vitality or propagating powers: once dried, Dr. Southey believes its life-history is ended. But the variola and varioloid poison may be dried, and, if neither frozen nor overheated, like mummy grain, it

will certainly retain its infecting properties for vears. So, too, the scarlet-fever, yellow-fever, plague, and typhus poisons can lie dormant in a drawer or cupboard for weeks, or months. or years, awaiting the conditions which shall favor future development. The plague is said to have broken out afresh after a hundred years in consequence of the re-opening of a plague-pit.

While most poisons are direct, although of greater or less vitality, it is possible that some require the fulfilment of some special developing conditions between the time of their discharge from one individual and their in-

sertion into another.

HOT WATER IN THE TREATMENT OF LACER-ATED AND CONTUSED WOUNDS (The Hospital Gazette, October 31, 1878).—Dr. Frank H. Hamilton reports two cases of the successful treatment of lacerated and contused wounds by the application of cotton batting soaked in water from 100° to 110° Fahr. and renewed every half-hour. In one of these cases a remarkable recovery from spreading traumatic gangrene took place.

Dr. Hamilton, after reviewing these cases, adds, "In using warm or hot water, wherever it is practicable, the bath or complete submersion of the injured member is always to be preferred, the limb being suspended in the water without sutures, adhesive strips, bandages, or dressings of any kind. If there should be any cause for delay, after the infliction of a severe lacerated wound, in resorting to the bath, it will be because there might be some apprehension of hemorrhage being thereby invited and promoted. But, if the vessels are properly tied, this delay need not extend beyond twelve or twenty-four hours.

"It is seldom found necessary to continue the bath beyond the seventh or tenth day, or beyond the period of active inflammation, and it is even sometimes quite objectionable to continue it beyond this period, on account of the ædema which is apt to ensue, the ædema being in part due to the necessarily dependent position of the limb, and also in part to the endosmosis of the water by the open tissues. After this period the warm-water or hot-water (as the case may demand) fomentations are to be preferred,-the limb being laid, as in the case of an arm, upon a pillow covered with oil-cloth and enveloped with large masses of cotton batting saturated with water. Even during the period of acute inflammation, if the patient becomes weary of the confinement of the limb to the bath, the fomentations may be substituted during the night or any other time when it may seem to be necessary.

EXAMINATION OF SEMINAL STAINS FOUND ON THE WOODEN FLOOR OF A ROOM.—Dr. Gallard, in an article in the Gazette des Hôpitaux, 1878, No. 44, arrives at the following conclusions: 1. The examination of these stains may give as authentic results as that of stains on linen or clothes. 2. If the semen form a sort of slightly adherent varnish on the floor, the flakes of which are easily separated. the examination is less difficult than when it has to do with linen or cloth, as it is only needful to dissolve the dried semen in a little distilled water. But if the semen have soaked into the wood, a little water must be placed in contact with the stain for a time, and the wood

must be scraped with a scalpel.

PRESSINERVOSCOPY.—This is the formidable name devised by Dr. August Pinel, of Paris, for a method of diagnosis of diseases of the chest and abdomen by compression of the pneumogastric and sympathetic nerves. By compression with the fingers on any portion of these nerves, and the peculiar sensations thereby produced, Dr. Pinel professes to be able to define the seat and nature of the malady from which a patient may be suffering. M. Burggraeve has declared that as a means of diagnosis it is even superior to stethoscopy or pleximetry.

## MISCELLANY.

A PRIZE of one hundred pounds for an essay on hydrophobia, its nature, prevention, and treatment, is offered by V. F. Benett Stanford, Esq., M.P., to be awarded by the Royal College of Physicians of London. The conditions under which the prize is to be competed for are the following:

1. The essay must be in English, or accom-

panied by an English translation.

2. The essay must be delivered to the Col-

lege on or before January 1, 1880.

3. Each essay to be accompanied by a sealed envelope containing the name and address of the author, and bearing a motto on the outside, the same motto to be inscribed on the essay.

4. The essay may be the joint production

of two or more authors.

5. The essay, if not published by the author within a year, to become the property of the

6. The prize not to be awarded unless an

essay of sufficient merit be presented.

The questions which are thought by the

College specially to require investigation are:

1. The origin and history of outbreaks of rabies, particularly in the United Kingdom and its dependencies.

2. The best mode of prevention of rabies.

The characteristics of rabies during life, and the anatomical and chemical changes which are associated with the disease in its successive stages, particularly in its commencement.

4. The origin of hydrophobia in man.

5. The chemical and anatomical morbid changes observed in the subjects of the disease, with special reference to those having their seat in the organs of the nervous system

and in the salivary glands.

6. The symptoms of the disease, particularly of its early stage, as illustrated in wellobserved cases.

7. The diagnosis of the disease in doubtful cases, from conditions more or less resem-

bling it.
8. The alleged prolonged latency of the

malady.

9. The efficacy of the various remedies and modes of preventing the disease which have been proposed, and what plan of treatment, whether prophylactic or curative, it would be most desirable to recommend for future trial.

DIDACTIC LECTURES ON DERMATOLOGY AT THE UNIVERSITY OF PENNSYLVANIA. - A course of didactic lectures upon dermatology -the first, we believe, ever delivered in this city—is now being given by Prof. Duhring in the University of Pennsylvania. Although no examinations on skin diseases are held in the medical course, yet these lectures of Prof. Duhring's are well attended by the advanced students. The lectures thus far have been upon the subjects of anatomy, general symptomatology, etiology, pathology, diagnosis, treatment, prognosis, and classification. remainder of the course will be devoted to the consideration of the specific diseases. Geo. B. Wood's collection of wax models deposited in the University museum, as well as Prof. Duhring's large collection of plates, water-colors, photographs, etc., afford ample illustrative material, and the students of the University are to be congratulated upon the advantages afforded them for acquiring a knowledge of this very practical branch of medicine.

DECLINE OF HOMŒOPATHY.—Were we to write anything like the following, we should be charged with unfairness and misrepresentation, or perhaps, in the elegant language of a certain distinguished homœopathic professor of surgery, with "giving expression to bigoted and slanderous statements." The extract is from the Homocopathic Times, the leading organ of homeopathy in this country,

"Accessions to our ranks are derived from only two sources: those who are educated under homeopathic auspices, and converts from the so-called regular school. Of the first class named, those who have graduated from our own medical schools, there were the present year only three hundred and nineteen, a number so small as to be scarcely sufficient to fill the places made vacant by death and other causes. It is plainly apparent, therefore, that recruits from this source must be largely increased, or else we must depend chiefly on the second class mentioned, viz., converts from the so-called regular school.

"On even a cursory examination in this direction, the result is exceedingly unpromising. Those of us who were participants in the contest between the two principal rival schools can vividly recall the scenes which occurred twenty and even fifteen years ago. Then there were constant accessions to our ranks from those of our opponents. Desertions were so numerous as to impair the strength of allopathic legal organizations, and, in some localities, seriously threaten their existence. At the present day the exodus has nearly ceased. The comparatively few converts who are willing, openly, to admit their belief in homeopathy, may be numbered by tens, while formerly there were hundreds.

"Whatever the influences have been which have checked the outward development of homœopathy, it is plainly evident that the homœopathic school, as regards the number of its openly avowed representatives, has attained its majority, and has begun to decline both in this country and in England.

The February number of the London monthly *Homwopathic Review* contains the following significant statement: "The number of those who are ready to assert their confidence in homœopathy may not have increased of late years, it may possibly have diminished," etc., etc.

Dr. Drysdale, in the British Fournal of Homæopathy, writes very despondingly: "Our numbers are not only not increasing in proper ratio, not even increasing at all, nay, even actually diminishing."—Michigan Medical

THYMOL.—This substance, which, on account of its being so much more agreeable than carbolic acid, bade fair to come largely into use as an antiseptic, appears not to be sustaining its first reputation. In the recent Surgical Congress at Berlin, the general voice was strongly against its efficiency, and much complaint was made of the swarms of flies attracted by it. It has also proved a failure at the Roosevelt and New York Hospitals,the wound acting under it almost as under a non-antiseptic dressing.
THERE were 21,682 deaths from snake-bite

and wild animals in India in 1877.

### OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY FROM DECEMBER 15 TO DECEMBER 28, 1878.

JANEWAY, J. H., MAJOR AND SURGEON.—Assigned to temporary duty at Fort Wood, New York Harbor. S. O. 231, Department of the East, December 16, 1878.

TILTON, H. R., MAJOR AND SURGEON.—Par. 5, S. O. 245, A. G. O., November 12, 1878, granting him an extension of his leave of absence for two months, is amended to grant said extension on Surgeon's Certificate of Disability. S. O. 274, A. G. O., December 21, 1878.

Brown, H. E., CAPTAIN AND ASSISTANT-SURGEON.—From and after January 1, 1879, to take station at Camp Guilford D. Bailey, Texas. S. O. 264, Department of Texas, December 16, 1878.

KINSMAN, J. H., CAPTAIN AND ASSISTANT-SURGEON.— Leave of absence extended one month. S. O. 104, Division of the Atlantic, December 23, 1878.

LORING, L. Y., CAPTAIN AND ASSISTANT-SURGEON.—Assigned to duty at Fort Hays, Kansas. S. O. 226, Department of the Missouri, December 12, 1878.

# PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, JANUARY 18, 1879.

## ORIGINAL COMMUNICATIONS.

VEGETATIONS OF THE ENDOME-TRIUM.

BY WILLIAM GOODELL, A.M., M.D.,

Professor of Clinical Gynæcology in the University of Pennsylvania.

Read before the Philadelphia County Medical Society, December 11, 1878.

THE vascularity of the womb, its sexual and periodic congestions, the structural energy with which it is endowed, and the lesions to which it is subjected, make it peculiarly liable to be invaded by benign and by malignant growths. The most common are those which develop in the endometrium in the shape of vegetations, and to these I shall limit my paper to-night. Of these vegetations I shall describe three varieties, beginning with the one most frequently met with.

# (a) Fungous Degeneration of the Endometrium.

A very common cause of menorrhagia. and also of leucorrhœa, is a hyperplastic condition or diffused thickening of the This pelining membrane of the womb. culiar proliferation of the endometrium shows itself by small sessile vegetations of a red, gelatinous appearance, which stud the mucous surface, and range in size from a millet-seed to that of a pea, by redundant mucous folds of a spongy consistence, and by club-shaped polypi. Then again there may be found small tufts of placental tissue, or placental villosities, which do not atrophy and disappear, because something has interfered with the process of involution. Various names have been given to this condition, but that of endometritis hyperplastica seems to be the best. A chronic endometritis is undoubtedly the most common cause; but whatever induces uterine congestion will also tend to produce these growths. Thus I have discovered them in wombs enlarged by a fibroid tumor and in those containing a polypus. They are very common in subinvoluted and in retroflexed wombs, and are almost always present in neglected cases of laceration of the cervix. I have also on several occasions found them in women who were avoiding pregnancy, and espe-

cially by the method of withdrawal. Under such circumstances the uterus maintains a high degree of congestion, and by constant repetitions of the exciting cause, it increases in size, its mucous lining becomes thickened, and fungous degeneration takes place. Sterility also seems to be no infrequent cause of the same thing, the menstrual and sexual congestions continuing without that break which gestation and lactation bring. With regard to the influence of imperfect sexual relations, a very interesting case came to my notice not long ago. A lady consulted me at my office about severe uterine hemorrhages. A speculum examination revealed two small polypi dangling out of the os. These I twisted off, and then proceeded to examine the uterine cavity with the sound. Upon its withdrawal I found on its tip a club-shaped polypoid growth, very nearly an inch long. This led me to use the curette, and I removed a large number of fungoid growths from the cavity, quite the largest in size that I have ever seen. She was married to a man twenty-five years older than herself. In other words, he had reached a time of life when his sexual powers were failing, while she was at an age when her own were vigorous and exacting. His embraces were at long intervals, and so imperfect that they inflamed her passions without satisfying or allaying them. This was to my mind, as well as to hers, the explanation of the chronic uterine congestion, the origin of the cervical polypi, and the cause of the fungoid degeneration of the endometrium. And here let me say that, in my experience, so close a relationship subsists between the existence of these cavity growths and that of cervical polypi, that the latter are pretty sure to be accompanied by the former. This explains the fact that the removal of cervical polypi is often not followed by that expected improvement in the menorrhagia. Whenever, therefore, cervical polypi are present, the uterine cavity should be searched for its own vegetations.

Endometritis hyperplastica is a disease more particularly of the child-bearing age; but, as will shortly be shown, it sometimes affects women long after the climacteric. Its existence can only be inferred by an ordinary uterine examination. The sound usually causes some blood to flow. When sponge- or laminaria-tents are used, these

vegetations or mucous folds are so flattened out and smoothed out by the pressure that the finger will rarely find them on the sides of the uterine cavity; but those on the fundus will very generally be felt either as slight roughnesses or as soft spongy tufts of mucous membrane which retreat before the finger. The only sure test of their presence is the gentle scraping of the endometrium by a curette, which will dis-lodge some of them, and will then bring away either club shaped polypi or soft,

gelatinous masses.

The disease being one of the endometrium, the microscopic examination will show characteristic changes in the mucous lining of the womb, but always reproducing the parent tissue. There will be found, according to Olshausen,\* "greatly hypertrophied mucous membrane, with increase of all its elements, dilated follicles, enlarged blood-vessels, and great cell infiltration of all the connective tissue. ning up to the epithelium are large ectatic blood-vessels filled with coagula, and near them great numbers of white blood-corpuscles, quite round and fresh-looking; while around the enlarged follicles there are many spindle cells arranged in regular lines. These prove the chronicity of the affection. Cross-sections of the glands show them to be round and normal. dilatation of the follicles differs in degree, but never amounts to a cystic formation visible to the naked eye. There is never any appearance of a decidua-like forma-Nonat† calls them "fongosités intra-utérines," and describes them as of the same structure as the uterine mucous membrane, being largely made up of connective tissue and fibro-plastic elements. and covered by the epithelium peculiar to the endometrium. Munde, in his admirable essay on the "Dull Wire Curette," ‡ quotes the microscopic observations of these vegetations by Dr. M. D. Mann, pathologist to the New York Obstetrical Society. According to him, they "consist histologically of structureless basement substance, containing great quantities of small round cells and nuclei, and portions of uterine follicles and vessels." letter on the subject, which Dr. A. H. Fitz, of Boston, was kind enough to write me, he says, "The glands are found elongated, the blood-vessels dilated and injected, and occasional hemorrhages are found to have occurred within the mucous membrane." Dr. W. F. Jenks describes these hyperplastic growths as "consisting of simple embryonic cells imbedded in an almost homogeneous or slightly fibrillar intercellular substance, which contain moreover the distinctive marks of uterine structure, muscular elements, glands, vessels, etc."\\$

When these vegetations are of this character there is generally very little difficulty in the way of their cure. Their existence being established by the use of a blunt curette, such as Thomas's, they are to be removed, if possible, by the same instrument. I say, if possible, because I have repeatedly found the blunt curette to fail in removing all the growths, and have had to resort to Sims's sharp curette, which is a far more efficient but, at the same time, a more hazardous instrument. Simon's spoon-curette is also a very handy instrument for this purpose. Whenever the redundant mucous membrane hangs down in spongy folds, I have found nothing to remove it so well as a small pair of fenestrated polypus-forceps. It pinches off each fold without injuring the sound structures; but it has the drawback of needing some previous dilatation of the cervical canal, which the curette does not ordinarily need. The sponge-tent sometimes cures this condition of the endometrium, either by crushing these vegetations or by entangling them in its meshes and breaking them off during its withdrawal. In most cases the curette is needed but once; but occasionally it will have to be resorted to oftener. Immediately after using it, I am in the habit either of swabbing out the uterine cavity with a strong tincture of iodine, or of injecting into it a few drops of the same fluid. One circumstance attending the use of the curette is the occasional postponement of the next menstrual This result happens often enough to make it worthy of note.

In illustration of this treatment, I shall give the brief histories of a few selected cases:

Case I.—Mrs. H. J., aged 37, and seventeen years married, has had two labors at term, and one miscarriage ten years ago,—the latter unwittingly brought on by the late Dr. Wash-

<sup>\*</sup> American Journal of Obstetrics, November, 1875, p. 561, † Maladies de l'Utérus. ‡ Edinburgh Medical Journal, January, 1878.

American Supplement to Obstetrical Journal of Great Britain, vol. i. p. 116.

ington L. Atlee during a uterine treatment. Since then she has not conceived, but has had menorrhagia, which steadily progressed until her monthlies became floodings, which greatly reduced her. I thoroughly scraped the uterine cavity with the blunt curette, and brought away some vegetations and a few mucous shreds. The next period was so profuse that I repeated the use of the same curette, and again brought away like bodies. The following period was much better, and I thought her cured; but the succeeding one ushered in so serious a flooding that I made up my mind that an intra-uterine polypus was the cause of it, and I introduced three tents. On the following day, with the assistance of Dr. Hermany, of Mahanoy City, and of Dr. B. F. Baer, I put her under ether and removed the tents. The finger passed readily into the uterine cavity, but detected nothing besides proliferation of the endometrium. Sims's curette, I, however, removed many vegetations, and among them a piece of deciduous-like membrane, covered with ramifying vessels, and about half an inch wide and an inch and a half long. The uterine cavity was next swabbed out with nitric acid. was rougher treatment, in so far as the acid is concerned, than I should now adopt, but it was followed by no worse inflammatory results than a slight metritis. This operation not only cured her of her floodings, but it more than cured her, for she did not again menstruate for six months, and is now quite irregular in the performance of that function.

Case II.—Mrs. —, of Omaha City, consulted me about serious floodings at her menstrual periods, which had greatly reduced her strength. Failing to cure her by the blunt curette, I introduced a tent, put her under ether, and used the sharp curette and polypus-forceps. Many vegetations were removed, but her next period was postponed for two months. She got well without any further

treatment.

Case III.—Mrs. D., of Georgia, presented the same symptoms as the preceding case. She was treated in like manner, and missed her monthlies also for two months. This happened six months ago, and the floodings have

not since returned.

Case IV.—M. McM., single, and aged 35, has always had free menstruation since puberty, but since January, 1878, her monthlies have been exceedingly profuse. They began last on May 21, and, as they continued despite all treatment until June 15, her physician on that day securely plugged her vagina, and sent her to the Hospital of the University of Pennsylvania. She was pale, bloodless, and so weak that she was brought from the railroad-depot in an ambulance. I at once put in tents, and kept them in forty-eight hours, so as to gain complete dilatation with one batch of them. On June 17, assisted by Drs. Palmer and Jones, I removed the tents,

and found three sessile polypi within the cervical canal, and one pedunculated one dangling within the os internum. This last one had acted like a ball-valve in hampering the flow of the menses and had been the cause of much dysmenorrhæa. After twisting off these polypi, I scraped the endometrium and removed a large number of hyperplastic vegetations. She got well, and has stayed so ever since.

Case V.—M. D., aged 21. Menstruation began at thirteen, and has gone on increasing until it lasted ten days and needed the use of from three to four napkins daily. I operated before the class of the University on October 17, 1877, and removed a number of vegetations. A slight parametritis kept her in bed for three weeks, but she got up well of

her old trouble.

Case VI.—F. J., a young married lady, from North Carolina, came to consult me about her general ill health, and especially about her sterility, she having been married already three years without conceiving. I learned that she had dysmenorrhæa and was losing altogether too much blood at her periods. October last, I scraped her womb with a blunt curette, but, finding very few vegetations follow its withdrawal, passed in the sharp curette. Numerous club-shaped polypi were removed. Her disease was a typical example of what Olshausen calls endometritis polyposa. Her next menstruation being free from pain and rather scant, she went home, stronger and better than she had been for years.

Of such cases, of which the above are but samples, I have had so many and such successful ones by one or at the most two applications of the blunt or of the sharp curette that I have ceased to keep any record of them. But I now come to a series of stubborn cases which have puzzled me not a little, and which lead me to think that I have much to learn on the subject of intrauterine vegetations.

About two years ago, the sister of a distinguished gynæcologist was brought to me from a distance, on account of terrible floodings. She was about fifty years old, a widow for over twenty years, of a florid complexion and full habit, and with a sluggish circulation, dependent, as I believe, on some obscure cardiac affection. She began to bleed about two years before, and kept losing more and more, until the loss had become very alarming. Accompanied by her physician and by a friend, she was carried on a litter and with her vagina very firmly tamponned. I found the cervix large and flabby, the os unusually patulous and jagged, the womb

retroflexed and measuring not quite four inches. So impressed was I with the conviction that she had a polypus, that I at once put in several tents, and invited my friend Dr. John Ashhurst to aid me in its removal. Nothing was, however, found besides a very large number of vegetations, so large that I began to fear the case was one of diffused sarcoma, and submitted them to two excellent microscopists, who independently concurred in pronouncing them benign and the production of an endometritis hyperplastica. Owing to exhaustion from these great losses of blood, this lady's convalescence was slow; but she ultimately got well enough to go home. She saw no monthlies for nigh three months; they then began to return, and more and more abundantly, until I was obliged to interfere with the curette and remove a number of growths, but not so many as at first. As after the preceding operation, she became much better, and staved so for some months. Then, in spite of repeated applications of nitric acid made to the cavity by means of a platinum tube, in spite of many intrauterine injections of iodine, of carbolic acid, and of iron, in spite of the use of several pieces of the silver nitrate, the bleedings began to return, and I shall very soon be again obliged to use the curette. Having lately complained of failing eyesight, I sent her last week to Dr. S. D. Risley, who finds that she has several retinal clots; and I cannot but think that this hemorrhagic tendency may throw some light on the case.

Two other analogous cases have come to my attention, but unfortunately in neither were the vegetations examined by the microscope. Yet from the macroscopic appearance I should say that they were simply hyperplastic growths. One was a patient of Dr. J. R. Chadwick, of He had repeatedly used the curette in her case, and as often had removed some vegetations. Last month, while on a visit to this city, her catamenia came on with alarming profusion, and she sent for me. Finding great difficulty in checking them, I used the blunt curette and removed a number of vegetations, but to no purpose. Several tents were therefore crowded in, and upon their removal I was able, with the finger, freely to examine the endometrium. Other vegetations being found, I then used the sharp

curette, and thus succeeded in stopping the bleeding.

The other case was a patient of my honored friend Dr. J. C. Reeve, of Dayton, Ohio. He had in vain repeatedly used the curette and every known intrauterine application for the cure of a menorrhagia, and finally he sent her to me. I used the blunt curette three times, followed each time by the sharp one, made two intrauterine applications of nitric acid, and several injections of iodine, and yet I fear

that she has not been cured.

Now this lady was quite stout, and the two preceding ones were of a full habit and of florid complexion. Excess of pabulum, therefore, may have something to do with the liability of these vegetations to return. Yet I cannot but fear that they may yet prove recurrent per se, and therefore quasi-malignant; but time alone will show this. Other physicians have been likewise perplexed. At a meeting of the Obstetrical Society of Boston,\* Dr. Chadwick referred to one of his obstinate cases, and said that "Dr. Fitz had been unable to pronounce between these modified conditions of the mucous membrane and sarcoma in one or two specimens which he had sent him;" Dr. Lyman stated that in one case the mass of proliferated mucous membrane "was different from anything he had before seen;" while Dr. Sinclair reported a case which he had been obliged to scrape three times within a year, before a cure was obtained.

# (b) Villous Degeneration of the Endometrium.

Another form of uterine vegetations occasionally met with is a villous degeneration of the lining membrane of the womb. To me this condition is yet a pathological puzzle, and in my ignorance I am compelled to resort to cases for illustration.

Case I.—On April 7, 1877, I was asked to see Miss ——, a somewhat corpulent maiden lady of fifty odd. Five years before, she had ceased to menstruate, but one year ago she began to lose blood from the womb at irregular intervals, and especially after riding in her carriage. For six months of the past year she had been attended by a very clever homocopathic physician, who, however, limited himself to a constitutional treatment. The rest of the time she was in the hands of a female practitioner, who treated her locally

<sup>\*</sup> Boston Medical and Surgical Journal, Oct. 10, 1878, p. 469.

for "ulceration of the womb." I found the cervix virginal and perfectly free from any vestige of disease, the womb movable and natural in position, but very nearly three inches in length. She had occasional hemorrhages, and was daily using two napkins to absorb a pinkish and an inodorous discharge. The os externum was too small to admit a curette, and therefore my treatment was an imperfect one until the 25th inst., when I prevailed upon her to let me use a tent. next day I scraped out the uterine cavity with the blunt curette, removed a small number of gray fragments, looking like boiled tapioca. and painted the endometrium with a saturated tincture of iodine. The discharge was reduced to the merest leucorrhœa, and, after paying her several visits, on June 7 I pronounced her cured and ceased my attendance. But on July 19 I was sent for, to learn that the pink discharge was beginning to return, and that a slight hemorrhage had taken place. The os uteri being now larger, I began a series of scrapings, both with the blunt and the sharp curette, and made intra-uterine injections of a saturated tincture of iodine, and of strong solutions of the silver nitrate, of chromic acid, of tannin, and of the subsulphate of iron.

The curetting and the applications did her much good for the time being, but whenever she made me desist from local treatmentfor she could not bear much pain—the discharge began to return. Once I slipped in three tents and examined the uterine cavity with my finger. I found nothing but a number of isolated rough points, which I scraped away with the sharp curette, and then swabbed out the cavity with fuming nitric acid. Several times have I pushed into the uterine cavity a good-sized piece of the solid silver nitrate,

but all with no avail.

Getting alarmed at the return of the vegetations, I submitted separate specimens to Drs. J. Tyson and Carl Seiler. The former under the date of October 15, 1877, wrote to me that "The fragments are those of a papilloma (Zotten-Krebs) or villous cancer of the In this decision Dr. Seiler also concurred, after an independent examination of

entirely different fragments.

One day in February, 1878, after a truce of about three weeks, another hemorrhage took place. I now found the os almost patulous enough to admit my finger, and when I introduced a small glass speculum into the vagina, the pressure of it upon the lower portion of the womb squeezed out a number of brainlike vegetations of unusual size. The curette and intra-uterine injections were of course again resumed, but in addition full doses of arsenic were given, and so the treatment went on until last July, when, upon giving an unfavorable prognosis, my patient concluded that I could not cure her, and very wisely discharged me. I have since learned that she is steadily failing.

Case II.—On March 28 of this year I was called by a medical friend to see a lady of full habit, who was about 45 years old. For a year she had been bleeding very desperately at her monthly periods, and she had now been losing blood for three weeks. I found a very ragged os, angry-looking enough to have been mistaken for a cancer, and large enough to admit the finger half-way up the cervix. The womb was very bulky, and gave a measurement of four inches. So much blood escaped on the withdrawal of the sound that the diagnosis of polypus was unhesitatingly made.

Four or five tents were accordingly crowded in, and the next day I went fully prepared to remove the growth. The patient was etherized, and upon the withdrawal of the tents I was able to explore very carefully the whole uterine cavity. To my surprise, no polypus was present, but in its place a large number of vegetations. These I removed with the polypus-forceps and with the dull and the sharp curette. Most of them came from the left cornu, and they were so numerous that they must have filled a dessert-spoon. The endometrium was next painted over with a saturated tincture of iodine. No bad effects followed, and she became very much better in every respect.

This improvement, however, did not last very long, and I was again compelled to use the curette on June 19, and yet again on July 5, removing on each occasion large quantities

of vegetations.

At this last visit I swabbed out the uterine cavity with fuming nitric acid. The benefit this time was more lasting; but a fortnight ago I was told by the physician that the hemorrhages were returning, and that my services

would soon be needed again.

Case III.—Late in the night of the 17th of last February I was summoned to see the mother of a medical friend. She was 65 years old, and, like the preceding cases, of full habit, but in splendid health. Her monthlies used to be very abundant, but they ceased at the age of fifty, and she had not since lost a drop of blood per vaginam. But during this day she felt her old menstrual pains, and at night, without other premonition, a profuse flow came on. I contented myself with giving her some doses of ergot, and two days later made a thorough examination.

The womb was movable and gave a measurement of three inches. The cervix showed no signs of disease, but the os was larger than it should have been at that time of life, and it gave egress to a fluid like the menses in color and in smell. The blunt curette being introduced brought nothing away; so a sharp one was used, which scraped off one hard mass as large as a bean, and numerous other tapioca-like growths of the size of a pea, which very nearly filled the bowl of a tablespoon. Since that operation she has not lost a drop of blood from the womb, has had no leucorrhœa whatever, and remains in apparently perfect health.

The high social standing of this lady, and her near relationship to one of our profession, made the question of malignancy one of great importance. On the other hand, the diagnosis of villous cancer and the constant return of the vegetations in my first case, and their large number with two returns in my second case, made me watch all three with intense interest. Specimens of the vegetations of each one were submitted to Dr. W. F. Norris, who was kind enough to examine them for me with the utmost care, and the following is his report:

"26th June, 1878.

"DEAR DOCTOR,-The specimens which you submitted to me are all essentially alike in structure.

"They consist of ovoid masses covered with clotted blood. After the removal of the latter, they appear of an ash-gray color, covered with minute rounded prominences, and average about seven mm, in length by five mm. in breadth.

"Some were examined while fresh by tearing, and without the addition of any reagent; others were treated with a one-fourth per cent. solution of silver nitrate, and others, again, hardened in nitric acid. Of the latter numerous sections were made, which showed everywhere a series of thin-walled blood-vessels, arranged in loops, covered by a columnar

"Those treated with silver nitrate presented over their entire surface a net-work of delicate black lines, including irregularly polygonal spaces due to the well-known action of this agent in intercellular material.

"With one or two exceptions, all the ovoid masses were, when fresh, very soft, and readily crushed between the fingers. Those which were harder were similar in structure to the softer ones above described, but owed their hardness to blood-clots which lay in the interpapillary interstices and which were undergoing absorption organization. The surrounding tissues, as well as the clot itself, were tinted with various shades of decomposing hæmatin, and in the clot itself were numerous single and many nucleated cells entangled in meshes of coagulated fibrin. There was nowhere any trace of the fibro-muscular walls of the uterus.

"I consider the growth to be a papilloma. As regards the question of malignancy, its epithelial nature, of course, gives it at once an appearance of relationship to the epithelial cancers; but this question, I think, must be decided by a section of the growth in situ, and the observation whether or not it has a

tendency to infiltrate and spread in the proper uterine walls.
"Yours, truly,

WM. F. NORRIS.

"1526 LOCUST STREET."

Very fortunately. I have not yet had the opportunity of making a section of such a growth in situ, but Dr. W. Lusk, of New York, reports a case\* which died from progressive cachexia, and in which he secured an autopsy. The examination of the womb was made by that excellent pathologist, Dr. M. D. Mann, who pronounced the disease to be "villous degeneration of the uterine mucous membrane," and adds, specimen is one of extreme interest both clinically and pathologically, no such case having been described by any author with whom I am familiar." Dr. P. B. Breinig, of Bethlehem, Pa., also reports an analogous case.† The fragments removed were submitted to the Committee on Morbid Growths of the Pathological Society of Philadelphia, who "were inclined to consider it a cystic papillary adenoma." Dr. Breinig has since informed me that he operated on this case on January 9, 1878, with Recamier's curette; that she was much improved for a short time, but died early in the following March. Winckel found a womb in the Dresden Museum, unfortunately without clinical history, which he and Dr. Hirschfeld carefully examined, and which, from the description and the beautiful illustration accompanying it, must have been analogous to my first case of this group.† Winckel, from the microscopic and macroscopic examination, called it an adenoma papillosum diffusum partim polyposum corporis uteri. Hirschfeld, confined himself strictly to its histological aspects, gave it the name of cylinder-celled adenoma (Cylinderzellenadenom). This specimen led Winckel to think that a case which he had treated at Rostock, and to which he had given an off-hand diagnosis of sarcoma, must have been one of these villous growths. In spite of treatment, the hemorrhagic growth returned, but owing to his removal from Rostock to Dresden he lost sight of the case. Later, he saw a case in which the disease began within the cervical canal, and, despite all treatment, rapidly descended. In six weeks' time it had invaded not only the vaginal portion, but

<sup>\*</sup> American Journal of Obstetrics, January, 1878, p. 133. † Philadelphia Medical Times, April 27, 1878, p. 354. † Die Pathologie der weiblichen Sexual-Organe, Leipsic,

Lief. ii., p. 40.

the vagina as well. As the woman now ceased to attend his clinic, he concluded that the issue was a fatal one. Referring to this case, he says, "The rapidity of return, and the great extent of surface attacked, show that such adenomata are not much behind the most malignant new formations." To this group of adenomata belong two cases reported by Matthews Duncan.\* In each there was a return of the growth in the uterine cavity, and the general health of each was failing at the time when his paper was read.

Villous cancer of the bladder is not an uncommon disease; but of the cavity of the womb it is either extremely rare, or it has not been recognized. Apart from my cases, and from those reported by Drs. Lusk and Breinig, and perhaps the two of Dr. Duncan's, I know of none with clinical histories. I do not think that the pathological status of these villous growths has vet been definitely settled; and the field remains open to future investigators. The careful autopsy of Dr. Lusk's case, the fatal issue of Dr. Breinig's case, and the unequivocal history of my first case, point to forms of a malignant type. But in my second case there is no appearance of progressive cachexia: on the contrary, the lady has greatly improved in health; while, as regards my third case, ten months have now elapsed since the use of the curette, and yet there have been no uterine symptoms whatever, and no impairment of her splendid physique.

With our present light the prognosis of villous growths of the endometrium must of course be a guarded one, and yet not wholly unfavorable. Winckel reports a cure of one, springing, however, from the fore-lip of the cervix; and Professor Kocker, of Berne, avers "that papilloma vesicæ in the female has been frequently treated by operative proceedings (through the dilated urethra) and brought to a satisfactory conclusion, and, indeed, been healed." † He further reports a cure of this disease in the male bladder, by opening the urethra on a grooved staff, and then scraping off the growth by a long sharp scoop, bent at an angle. Another case of villous cancer of the female bladder is published by Dr. W. Alexander, who in

October, 1877, and in the following May, scraped off the growth with apparently good results.† Bryant, however, declares that "there is no cure for this affection. . . . The disease usually destroys life in about two years."8

#### (c) Sarcomatous Degeneration of the Endometrium.

To make this memoir more complete, some reference must be made to sarcomatous degeneration of the endometrium. And I wish here to be understood as not referring to sarcoma of the parenchyma. which is essentially fibroid in its structure, circumscribed in its growth, and which assumes a tumor-like form from the outset; but to sarcoma of the mucous membrane, which begins as a diffuse proliferation and grows in the direction of least resistance, viz., into the uterine cavity. It may. however, secondarily invade the wall of the uterus, either by destructive pressure or by direct infection; but this happens only in its last stages. It consists microscopically of a new growth of small round cells, which, as Jenks, who has written an excellent paper on the subject, has observed, "are always separated the one from the other by a certain amount of intercellular substance. and are arranged after no definite type, never packed together in alveoli, as is the case in cancer.

Irregular and profuse menstruation, and intermenstrual leucorrhœa gradually becoming more and more fetid, are the first symptoms; then pain, when the mass has grown large enough to arouse the resentment of the womb and awaken its contractions. The curette will cause considerable hemorrhage and bring away many fragments which present the appearance of medullary cancer; but a microscopic examination will infallibly determine their character. If the cervical canal be now dilated and the finger passed in, the uterine cavity will be found filled by an irregular, ragged, and diffuse growth, without a capsule, which breaks down under the finger. Sometimes the womb, irritated by the growing mass into powerful contractions, will force a portion of it into the vagina. It will then assume the form of a polypus, the pedicle of which will be the part con-

<sup>\*</sup> Obstetrical Journal of Great Britain and Ireland, Novem-

ber, 1873, p. 497. † British and Foreign Medico-Chirurgical Review, July, 1876, p. 210, from Centralblatt für Chirurgie, April 1, 1876.

Lancet, August 17, 1878, p. 209.

Surgery, p. 505. American Supplement to Obstetrical Journal of Great Britain, vol. i. p. 115.

stricted by the os uteri. By this constriction the circulation of the protruded portion becomes impeded. It therefore disintegrates, bleeds profusely, and gives off a very fetid smell. Its diffuse growth, absence of capsule, friability, placenta-like structure to the feel, and, later, its excessive fetor, stamp it with an almost unquestionable macroscopic individuality.

The prognosis is an extremely unfavorable one, but the fatal issue is greatly postponed by operative measures, — far more so than in epithelial cancer of the

cervix.

The treatment consists in repeated removals of the growth as fast as it is renewed. This is best accomplished by crushing off the polypoid portion by the écraseur, by scraping its base with a sharp curette, and by cauterizing it either by the hot iron or by fuming nitric acid.

I have met with this disease in one typical

case:

M. D., aged 45, was, according to her own account, well and regular until June, 1871, when she "flooded" continuously for four weeks. July 4, she called in a physician, who removed a tumor from her vagina as large as her fist. She was now free from hemorrhage until Christmas, when flooding again began. As nothing checked this, a vaginal examination was made, and another tumor found. It was removed by the écraseur in February, 1872, and again a third one in the following April. The following June she was first seen by me, and I found a polypoid tumor as large as a hen's egg protruding from the os uteri. It had no pedicle other than the constriction caused by the os, and seemed attached to the whole left lateral surface of the uterine cavity as far as the finger could reach. Being very friable, it broke down under traction, and was, therefore, removed (July 1) in fragments by fenestrated forceps, curved scissors, and by scraping the uterine walls with the curette and the finger-nail. For nigh two months succeeding the operation, the patient, being put on iron and arsenic, improved astonishingly, and I flattered myself that she was cured; but late in August hemorrhage again returned. In spite, now, of the use of the curette, of intra-uterine applications of carbolic acid, of the silver nitrate, of tincture of iodine, and of nitric acid, repeated alternately every week after the operation, the growth was slowly reproduced. November 2, she passed a large fragment, after severe expulsive pains. On the succeeding day the os was found blocked up by an exceedingly offensive mass, which was removed in fragments and sent to my friend Dr. William F. Jenks for examination. He found the growth to be a

round-celled sarcoma. The uterine cavity seemed now to be wholly invaded. On the 16th, another large mass was expelled, after very severe expulsive pains. She now steadily grew worse, and discontinued her attendance on the clinic of the University of Pennsylvania. Subsequently it was learned that after being greatly reduced by hemorrhages, and after suffering more or less from severe uterine colics, she died early in 1873.

Another very analogous case I have had. verified by microscopic examination; but I have mislaid my notes, and cannot remember the details. Two years ago I am sure that I saw a third case, a patient of Dr. E. L. Evans, and a lineal descendant of one of our Hessian prisoners who settled down on the Neck after the close of the Revolution. She was over sixty, and had been losing blood,—a loss which she had at first welcomed as a token of returning youth, but she soon changed her mind and sent for Dr. Evans. He discovered the tumor, and asked me to see her. I found a large friable and non-capsulated tumor, exactly as in my first case, protruding from the os. It broke down under traction, and I wrenched off fragment after fragment with a polypus-forceps until its base was reached, which seemed to cover also the whole left lateral surface of the This I scraped smooth and endometrium. then cauterized with a saturated tincture of iodine which happened to be in my bag. I gave a very unfavorable prognosis; and yet no hemorrhage has since returned, and the woman is apparently now in perfect health. Very unfortunately, I lost the fragments carried away for microscopic examination; and yet I cannot help thinking that it was an undoubted case of roundcelled sarcoma. If so, it will sooner or later return.

## A MODIFICATION OF BLAKE'S-WILDE'S AURAL POLYPUS SNARE.

BY CHARLES HENRY BURNETT, M.D., .

Aural Surgeon to the Presbyterian Hospital; Consulting Aurist to the Pennsylvania Institution for the Deaf and Dumb, Philadelphia.

M OST surgeons are familiar with Wilde's aural polypus snare, and also with the admirable modifications of that instrument suggested by Dr. Clarence J. Blake, of Boston. Among these improvements—for such, indeed, must these

modifications be called—the principal one consists in making the wire run through a narrow barrel instead of on each side of a solid shaft. This change in the instrument of Wilde at once provided aurists with a much narrower and hence better instrument with which to extract aural polypi.

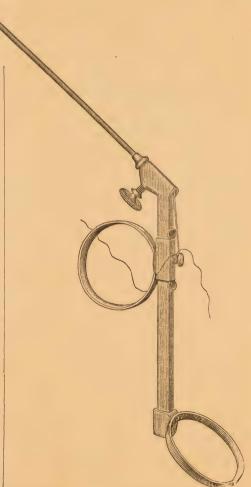
However, as great as this improvement is, I have never found in any of the instrument-makers' shops a Blake canule narrower than 2.50 mm. in its outside diameter, and all of them are slightly widened and flattened

near the distal end, so that a transverse section of the canule at that part is an ellipse, the longest diameter of which is 4 mm. and the shortest 2.50 mm. Hence there is a kind of knob, thus placed at that end of the instrument which is to be introduced, in many cases, as far as the fundus of the external auditory canal, or perhaps even as far as the tympanic cavity. But even with diameters as small as these. an instrument when inserted into the auditory canal would produce considerable darkening of that cavity, the normal diameter of which at its opening is about 8 or 9 mm., and at the fundus about 6 or 7 mm.

In order to overcome this disadvantageous darkening in operating in the auditory canal, I have found it of great service to have the canule which conveys the wire in the Blake's-Wilde's snare, still narrower, and of uniform diameter from end to end.

Therefore I have had made,\* and have used successfully, a strong and beautiful steel canule, 6 cm. long and 1 mm. in outside diameter, through which to convey the wire which forms the snare. The mouth of this tubule is divided into two equal openings by the insertion of a small strip of metal (seen in the figure, under the loop), and the outer edge of the mouth is bevelled, so that the operating end of the instrument is less likely to wound the tissues of the external auditory canal. Of course, the slenderness of the tubule and the smallness of the fenestræ at its distal end render necessary the use of very fine wire, and therefore I have tried, so far with entire satisfaction, fine brass piano-wire. The canule, thus narrowed and armed with

wire, is adjustable to the Blake handle, as shown in the accompanying figure. The tubule for conveying the wire might be made of the same dimensions, of virgin silver, and thus rendered flexible.—a very desirable character in some instances, in which a polypus lies far forward in the anterior part of the canal or tympanum, and



in which the anterior wall of the canal is well curved backward.

No such originality as is found in Blake's instrument is claimed for the wire-conveying tubule as modified and here described by the writer; but any one operating with the narrower instrument will find that he has more light, which is an important consideration in the use of any instrument in so small and delicate an organ as the ear.

<sup>\*</sup> Through the kindness of Dr. James W. White, at White's Dental Depot, Philadelphia.

## NOTES OF HOSPITAL PRACTICE.

#### NEW YORK HOSPITAL.

CLINIC OF DR. L. DUNCAN BULKLEY.

Reported for the Philadelphia Medical Times.

(Continued from page 156.)

CASE VII.—CAPILLARY VARICOSITY OF THE LEG.

THE next is a very important case, especially taken in connection with the preceding. This woman also has on her leg a lesion which I think almost any observer, from the appearances which it presents, would at first sight certainly pronounce syphilitic. It forms, therefore, one of those remarkable exceptions which we meet with in occasional instances, and to which almost every general rule is subject. making a careful examination here, it is found that the superficial veins of the whole limb are in a marked varicose condition, and this patch upon the leg, so far from being of syphilitic origin, is simply the result of the same varicosity affecting the capillaries of the part. The brownish discolorations grouped together, which under ordinary circumstances would be regarded as characteristic of the stainings left by a tubercular syphiloderm, are here undoubtedly due merely to disintegration of the red corpuscles of the blood which has followed the rupture of the vessels. On the other limb we find the same marked varicose condition of the veins, and also similar patches above as well as below the knee, which might easily be taken as evidence of the syphilitic nature of the case. But she has not had syphilis; these stainings have never been preceded by any other lesion; they have long remained in their present condition, and are certainly not due to syphilis. I have seen several of these cases. The lesion is not described in the books.

#### CASE VIII .- ECZEMA CAPITIS OF CHILDHOOD

In this little patient, two and a half years old, we see a well-marked instance of the ordinary eczema capitis of childhood. There is upon the head a generalized pustular eruption, which is very itchy; and if the firmly adherent crusts are removed, a moist exudation will be found beneath. In the present instance the trouble, as is so often the case, is not due to the presence of lice. The child is, as you perceive, of a decidedly strumous habit, which makes it pe-

culiarly liable to skin-diseases; and in all strumous conditions these tend to suppuration. I will merely remark, in passing, that such a head as this is better treated by the use of cod-liver oil internally, externally, and, I was about to say, eternally, than by any other agent or agents with which I am acquainted. Arsenic would not do this patient any good.

#### CASE IX.—FADING PAPULAR SYPHILIDE.

The next patient I have to show you is a young woman upon whose person there is a general papular syphiloderm, which is, as you see, especially well marked upon the arms. It is now, however, rapidly fading, so that the color is not nearly so bright as it was a short time ago. Such an eruption as this belongs to the early stage of syphilis, and, while a stain is left after it, it never results in a scar. As in the present instance, it ordinarily covers the surface generally, and is apt to be particularly distinct upon the face and arms. It should never be mistaken for any other affection; and, indeed, the only disease that at all closely resembles it is lichen blanus. I had hoped to have a case of the latter disease here to-day, to contrast it with the syphilitic eruption upon this patient, but have, unfortunately, been disappointed. My own practice is always to place such patients as this upon the "mixed treatment' (iodide of potassium together with mercury).

#### CASE X.-FAVUS.

Here is a boy of thirteen, who is the subject of the parasitic affection known as favus or tinea favosa. Upon his head are seen in a well-marked manner a few of the characteristic yellow cup-shaped crusts with one or two hairs in each, which are so typical of the disease. In the plate, however, which I now show you, and which I regard as a most important picture of the disease for you to remember in connection with favus, in our whole collection, the head is seen to have become almost entirely bald, and there are no cups whatever. This is the advanced stage of the affection, to which all cases tend to progress unless interfered with by appropriate treatment. In the present instance you observe that there are a number of spots upon the scalp almost entirely devoid of hair, and the complete destruction of the latter is the natural effect of the disease. The vegetable parasite, Achorion Schönleinii, feeds, as you know, upon the epithelium elements of the skin, and penetrates in the rootsheaths, down through the entire depth of the hair-follicle, completely destroying them, and sealing it up hermetically, and putting at an end forever the reproduction When favus has once done its work of destruction it is utterly in vain to make use of even the most stimulating applications to the scalp; for, do what you will, hair will never grow there again. For this reason it is important for you to remember this plate showing the baldness, for it is often in this condition that patients will first come to you. The disease results in the formation of cicatricial tissue. Here are the spots which have been denuded of hair by it: the surface is quite rough to the feel, and there are a few stiff hairs still remaining. In these particulars, therefore, the affection is to be distinguished from alopecia areata, where the surface is smooth and the bald spots contain only a few downy hairs, if any at all. In this patient the favus has existed for a long time, and he also has a brother who has been affected in the same manner for a considerable period. As I before remarked, it has no tendency to cure itself or to terminate except with the complete destruction of every hair on the head.

In regard to the treatment of favus, I may say that there is only one way of making a cure, and that is a very tedious one, viz., by epilation. It requires great patience on the part of both the physician and the patient; and in this case, through the faithfulness of my assistant, Dr. Robert Campbell, and the perseverance of the boy himself, the case is gradually becoming cured. For eight long months now has the process been carried on, with intervals of only a day or two at a time. By epilation I mean the extraction, with a pair of forceps specially adapted for the purpose, of every hair on the affected part; and in the case of one young girl who had had favus for five years, Dr. Campbell actually removed more than seventy thousand hairs within a period of several months. a tolerably rare affection; but whenever you get hold of a case you will get great credit by its cure in this manner, although the process is necessarily such a tedious As soon as a number of hairs have been extracted, a solution of the bichloride of mercury, of the strength of from five to ten grains to the ounce, should be ap-

plied to the part by the physician as a parasiticide. This, as I remarked, is the only way of curing favus. Some time ago. Hughes Bennett thought he had discovered a specific for favus in cod-liver oil. In a few months after its apparent cure by this agent, however, it was noticed that the disease always came back. In the place of the bichloride of mercury other applications may be employed after epilation, if preferred, such as sulphurous acid, diluted citrine ointment, turpeth mineral, etc. This boy is now two-thirds well, and will be cured entirely before very long if the treatment is persevered in. But I must caution you and him not to stop the treatment too soon; the disease is very rebellious. Among the plates which I pass around, you will see some of favus of the epidermis, which is simply superficial in its growth and looks very much like ordinary ringworm (tinea trichophytina). Ordinary ringworm (of which I also show you representations), you must remember, is entirely distinct from favus. Here is a plate of great importance, which represents the parasite of the latter. Achorion Schönleinii, and in the pictures near it the two other vegetable parasites, trichophyton and microsporon furfur.

Before leaving the subject of favus, I will exhibit to you a specimen of it in the mouse, from which many cases originate. There is this difference between the disease in the mouse and in the human subject, however, that in the former it tends to cure itself, which, as we have seen, is not the case in the latter. This was illustrated in an experiment shown at the New York Dermatological Society some little time A mouse suffering from favus was confined in the same cage with a number of others free from the disease. After a certain period had elapsed, it was found that a spontaneous cure had occurred in the case of the affected mouse, while all the others were now the subjects of the

disease.

## TRANSLATIONS.

EXPERIMENTAL RESEARCHES INTO THE Origin of Scrofulous and Tuberculous Inflammations of the Joints.—Dr. Max. Schüller (Cbl. f. Chirurgie, October 26, 1878) says it is often observed what very slight injuries may bring about in some

persons the severest affections of the joints: a push, a slight blow, a fall upon the joint, is enough. The only explanation as to why such severe results should follow such slight injury in certain individuals is found in the supposition that some peculiar condition of the blood or tissues exists favorable to such changes. Whether this supposed condition of the blood and tissues, in persons usually called scrofulous or tuberculous, rests upon a change in the constitution of the essential tissues, or whether it depends upon the presence (by penetration, for instance) of foreign substances or organisms which may act as inciters of inflammation of a special sort, Schüller is not prepared to say. It has suggested to him, however, certain experiments, which he has performed as follows. Having taken a certain number of animals, either dogs or rabbits, he injected into the lungs through the trachea, or directly through the chest-walls by means of a hypodermic syringe, tuberculous sputa, bits of tubercular matter, and bacteria raised in Bergmann's solution. In a few cases he allowed the animals confined in closed chests to breathe an atmosphere saturated with these matters. After some time the animals were submitted to some slight traumatism of a joint, a contusion or a distortion of the knee. Smaller animals died in the course of the experiment, but the larger ones lived several weeks, and even two months. Most of the animals. however, were killed at an early stage of the experiment, in order to observe the earlier changes. Almost without exception, disease of the joint was observed, granular growths in the synovialis, together with thickening of the entire joint. The cartilages were only clouded, but the bony portions of the joints were decidedly enlarged. They could be easily cut; the meshes of the spongiosa were wider and more full of blood. Centres of softening could not be observed macroscopically for a long time. "Control" animals wounded without previous infection by tubercle showed no such signs of disease. Injections of tuberculous material directly into the joint gave similar results. Schüller hopes in further experiments to examine into the condition of the joint at a later

TREATMENT OF RHEUMATISM WITH BENZOIC ACID.—Senator recently read an article before the meeting of German phy-

sicians and naturalists on the treatment of rheumarthritis by benzoic acid. He was led to examine into the properties of this remedy, because, in spite of the great advantages possessed by salicylic acid, this cannot be given in the large doses necessary to a cure without the occasional production of disagreeable after-effects. In addition, salicylic acid occasionally Finally, it would be much gained if some light could be thrown on the nature of the disease; for instance, if another antizymotic, like benzoic acid, should be found to act as well as salicylic acid. Senator has thus far used benzoic acid in twenty acute and ten sub-acute cases. The latter may be left out of consideration, since they offer such a poor chance for recovery. Benzoic acid was indeed tried faithfully in alternation with salicylic acid, but without success. In the acute cases, on the other hand, the effect of benzoic acid was so favorable as to offer great inducement to further trial. chief advantage of benzoic acid appeared to lie in the fact that it produced no disagreeable symptoms, and that in the very cases where salicylic acid had disagreed, benzoic acid, in the same doses, cured the patient without any disagreeable aftereffects. On the other hand, however, benzoic acid did not act so rapidly, nor did it produce the same rapidity of influence in lowering the temperature. Senator has found the same difference in this respect when salicylic and benzoic acids were compared together with regard to their influence in lowering high temperature in other diseases; but the fact that larger doses of benzoic acid can be used without fear counterbalances this slowness of action. The doses given by Senator vary from 8 to 12 grammes (3ii ad 3iij), or even more, daily. When he wants to gain a rapid decrease of temperature he uses salicylic acid temporarily.—Wien. Med. Presse, No. 41, 1878.

More about the Therapeutic Uses of Iodoform.—In addition to the article of Bernatzik, translated for the Times, December 7, 1878, we give the following contribution from Moleschott (Chl. f. Chir., No. 47, 1878; from Wien. Med. Wochens.). M. recommends an ointment of iodoform, I part to 15 simple ointment, or dissolved in collodion in the same proportion, against stubborn glandular enlargements. Lymphatic tumors the size

of one's fist disappeared in quite a short time by this treatment. In a case of lienal and myelogenic leukæmia, brushing the splenic region over with iodoform collodion did good service. In the same way, orchitides and enlarged and hard buboes in syphilitic subjects disappeared under treatment. M. gave iodoform at the same time internally in doses of .os to o.1 grm. (gr. 3/4 ad 11/2) several times a day. In addition. M. saw effusions into the pleura. pericardium, peritoneum, even into the arachnoidea, in fact, disappear after diligent painting on of iodoform collodion. In the same manner, severe ascites in a consumptive patient was relieved, diuretic pills, however, having been administered at the same time. Out of five cases of hydrocephalus acutus, three were cured by the external use of the remedy. One case of hygroma cysticum patellare disappeared after two weeks' treatment. In fungous inflammation of the joints, even in repeatedly recurrent tumores albi, the treatment was successful. Besides its discutient and absorbent qualities, iodoform is also anæsthetic, as is particularly shown in its influence upon gouty attacks. In acute and chronic rheumatism, however, iodoform exercises no anæsthetic influence.

THE OCCURRENCE AND SIGNIFICANCE OF SUPERNUMERARY BREASTS.—Leichtenstern (Cbl. f. Chir., No. 47, 1878; from Virch. Archiv) has collected ninety-two cases of polymastia and polylutria from literature, and has added thereto twelve of his own. He does not regard it as a very rare It occurs as often, though anomaly. more rudimentarily, in men as in women. Ninety-six out of one hundred and five nipples occurred on the anterior portion of the thorax, five in the axilla, two on the back, one on the acromion, and one on the They were usually within and below the normal breasts, and were never on the median line. Rarely were there more The frequency and regularity than two. with which the supernumerary nipples were found situated as in mammalian animals have led L. to the conclusion that atavism, or an attempt to return to an ancestral type, had come into play.

INCONTINENCE OF THE PYLORUS.—Ebstein (Wien. Med. Presse, No. 41, 1878) gives a method of ascertaining whether or not the pylorus is pervious, which consists essentially in the introduction of the elements of Seidlitz powder in small quantity

into the stomach. If the pylorus is impervious, as it should be, the stomach will become dilated and easily distinguishable by palpation. If, however, it is pervious, the intestines will become tympanitic along their whole course, and the stomach will be indistinguishable. A pervious condition of the pylorus ordinarily, though by no means always, depends upon cancer, and it is obvious that in the simple method of examination mentioned we have an addition to our means of diagnosis. Many a case, says Ebstein, has been diagnosticated hysterical tympanitis, which in reality was one of incontinence of the pylorus. x.

DIFFERENTIAL DIAGNOSIS BETWEEN EPI-THELIOMA OF THE TONGUE AND TERTIARY Syphilitic Glossitis, according to Four-

Ulcerative lingual epitheli- Ulcerative gumma of the oma. oma.

1. Disease of adultage: max-

imum frequency between 50 and 70.
2. Predisposing causes: he-

reditary cancer. No syphilitic antecedents (except by coincidence).

Frequent foregoing "lin-

- gual psoriasis."

  4. History: appearance as a hard superficial node externally; then, more or less rapid surface ulcera-tion. No opening or evacuation from the first of an abscess : no cavern.
- 5. May occupy the inferior surface of the tongue.

  of the tumor.

  Occurs exclusively on the dorsum and sides of the
- 6. Lesion single and unilateral, with extremely rare exceptions.

7. Lesion, a tumor ulcerated on its surface.

8. Edges everted, with a raised border, unequal, irregular, excavated, etc.

9. Surface bleeding spontane-

ously or on the slightest touch.

10, Secretion abundant; in later stage fetid and ich-

11. Spontaneous lancinating pain in ulcer, sometimes darting towards ear.

naring towards ear.

12. Functional troubles always marked (immovability of tongue, difficulty of speech, mastication, deglutition; salivation,

etc.). 13. Lesion giving rise after a time to general symptoms

of cachexia.

14. Microscopic examination shows the characters of epithelioma.

15. Ganglions affected after a

certain time.

16. Uninfluenced, or influenced unfavorably, by antisyphilitic treatment.

1. No particular age, but usually at a younger date

2. Syphilitic antecedents. No antecedent cancer(except by coincidence).

- 3. No foregoing "lingual psoriasis."
  4. History: appearance as a hard nodule under the surface, then sudden surface, then sudder opening as of an abscess temporary cavern, and soon after rapid ulceration, discovering the core
- tongue; never on the in-ferior surface.

  6. Lesion sometimes multiple
- and bilateral.
- 7. Lesion, an ulcer, without a tumor in the strict sense.
  8. Edges excavated deeply, sharply defined, adherent.
- g. Bottom of ulcer shows a slough; no tendency to
- 10. Secretion slight and not ichorous.
- rr. Ulcer not spontaneously painful; no darting pains.
- 12. Functional troubles less marked than in cancer. Tongue not immovable, as in cancer, at least not to the same degree.
- 13. Lesion itself gives rise to no cachexia.
- shows the characteristics of degenerated gummy 15. Ganglions intact.
- 16. Antisyphilitic treatment beneficial.

—( Jour. des Sci. Méd., 1878, p. 510; from Lyon Méd.)

# PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, JANUARY 18, 1879.

#### EDITORIAL.

NATIONAL LEGISLATION IN REGARD TO PUBLIC HYGIENE.

A FURTHER continuance of the discussion in these columns of the need of national legislation in regard to Public Health seems to us unnecessary, because the need has come to be recognized everywhere by the profession and in most quarters by the educated laity. problem of to-day is as to the form which legislation ought to take. In the outset of this new discussion it cannot be too strongly recognized that the matter involved is of the utmost importance. Most of the present so-called burning political questions will seem of less and less importance as time flies and they become more and more remote, but the influence of legislation upon the lives and health of this people will grow for good or for evil as the country advances in wealth and population and its inhabitants are more and more affected by luxury and poverty, by crowding and commerce. To the denizens of a scattered hamlet in the wilds it matters little what is done for the public hygiene; to the generations of a metropolis it means to many existence or nonexistence, to all strength for labor and health for enjoyment, or feebleness with its poverty and distress. Then, again, as human relations become more complex and multifarious, as commerce, manufactures, epidemic, climatic, and territorial influences jostle in a continual whirl of contending forces, it is plain that it becomes more and more difficult to secure the proper regulation of the various interests so that no one shall from a hygienic point of view overcrowd another, and all shall with the least violence to each be brought into the completest hygienic harmony. When to these facts are added the peculiar character of our people, government, and country, and the little positive knowledge that we have concerning the matters involved, it is doubly apparent that of all things hasty legislation is to be most dreaded,—that bad laws will prove worse than no laws, and that a wise legislator will hesitate and take counsel of those most fitted to give advice, not only by knowledge and ability, but also by freedom from any possible personal interest.

Notwithstanding the magnitude and difficulties of the subject, however, the country is threatened with legislation which is not only of the crudest character, but is so evidently of personal origin and urged forward by a strong political or personal influence, that only a decided outspeaking of the profession can prevent what it would seem to us is worthy of being called a national calamity. On December 10 a bill was introduced into the Senate by Mr. Lamar, which, in order to save space, we print in another column. (See page 196.) A great objection to this bill lies in the fact that immediately and without consultation or experiment it creates an important new permanent department of the government, and gives to one man the settling of all the most complex questions in regard to public health; and this at a time when the general discussion has just reached the stage in which the question is settled that there ought to be some legislation.

The personal inspiration of the bill is evinced by its uniting in one person duties whose chief connection seems to be the personal results to which they will lead. The management of the Marine Hospital service has certainly no close connection with the acquiring and diffusing of hygienic knowledge, and, to our thinking, it is very doubtful whether either service would be the gainer by such union. The abolition of the position of the Supervising

Surgeon-General of the Marine Hospital service would naturally lead to the appointment of its incumbent as the "National Director of Health." Without intending to be in any way more personal than is absolutely demanded by the circumstances of the case, we feel required to state that the great mass of the thinking portion of the profession would at once recognize the unfitness of Dr. Woodworth for such a position. In his present office he does well, but to fill the proposed post with advantage would require a much higher and broader intellect than is necessary in the management of a mere hospital service or fund, or than Dr. Woodworth has given any evidence of possessing. Indeed, the difficulty of finding the proper man is one great objection against the bill.

In contrast with the bill just spoken of, we elsewhere print the essential portion of the memorial of the Public Health Association,—a memorial whose cautiousness and catholicity must commend it to every one. It is so complete and so convincing in its arguments that we do not propose to say much about it. It does, however, seem fitting to call attention to the fact that under its provisions in regard to appointments it is impossible to predict what the personnel of the proposed commission will be, and that therefore the proposal is free from any personal taint; further, that it is equally free from crudity, because it is only an attempt to decide what legislation is wisest, not to fix during our present ignorance a permanent measure only to be abolished after long trial and suffering. We trust, therefore, that our readers may take such interest in this subject as by letter or personal interview to make known to their representatives in both houses of Congress the merits of the question.\*

#### LEADING ARTICLES.

## PROPOSED SUBSTITUTES FOR SALICYLIC ACID.

SALICIN-BORAX.

CARBOLIC and salicylic acid are not therapeutically free from objection, and consequently search is continually being made for a drug to replace them. There are several proposed substitutes which have in them sufficient of promise to warrant our calling attention to them and laying before our readers briefly the present state of our knowledge, especially with the hope that some will be stirred thereby to testing the value of these substitutes and giving through our columns the result. To-day we shall discuss salicin and borax; in our next issue, thymol and benzoic acid.

Salicin is obtained from the bark of the willow and other trees. It occurs sometimes in tabular crystals, more frequently in white, shining needles of neutral reaction, soluble in about thirty parts of cold water, very soluble in hot water and in alkaline solutions. Concentrated sulphuric acid dissolves it, with the production of a beautiful red color. By carefully warming it with dilute sulphuric acid it is converted into glucose and saligenin, and it is there-

fore a glucoside.

The action of salicin upon the animal organism is not known. It is certainly rapidly absorbed, probably as salicin; but once in the blood it seems to be rapidly decomposed, the products of its change appearing in the urine fifteen to thirty minutes after the ingestion of a single This change does not appear to be complete, as, according to Husemann (Pflanzenstoffe, 963), in the urine of man and rabbits after the ingestion of salicin not only saligenin and salicylic acid but also unchanged salicin occur. Further, Falck, injecting salicin into the blood of the dog, found that it chiefly escaped from the kidneys unaltered. The elimination seems to go on slowly, as Senator has detected salicylic acid in the urine sixty hours after the ingestion of a single dose of salicin. (Berlin. Klin. Wochens., 1877, 181.)

<sup>\*</sup>The following are the members of the committees to whom the bill has been or will be referred, and information should especially be furnished to them. Senate Committee.—Hon. I. G. Harris, Tenn.; Hon. Stanley Matthews, Ohio; Hon. L. Q. C. Lamar, Miss.; Hon. A. S. Paddock, Neb.; Hon. S. B. Conover, Fla; Hon. A. H. Garland, Ark.; Hon.

J. B. Eustis, La. House Committee.—Hon. H. Casey Young, Hon. R. L. Gibson, Hon. C. E. Hooker, Hon. John Goode, Hon. Julian Hartridge,\* Hon. Leopold Morse, Hon. J. A. Garfield, Hon. A. C. Harmer, Hon. S. B. Chittenden.

<sup>\*</sup> Dead.

In 1874. Dr. Maclagan, led by some fancied dependence of rheumatism upon malaria, began the use of salicin in acute rheumatism, and in 1876 (Lancet, 1876, i. 342) announced that it was a specific remedy, rapidly abating both the fever and the local symptoms. In the same year (Centralb. Med. Wissens., 1876, 241; also Berlin. Klin. Wochens., 1877, 181) H. Senator confirmed these statements. and further affirmed that in various affections he had found salicin to have an antipyretic power entirely comparable to that of salicylic acid. If these views are correct, the freedom from irritant properties and disagreeable taste made salicin The only person, superior to the acid. other than those mentioned, who has tested the matter on a considerable scale, is Dr. Büss, who does not find that the drug is nearly so powerful as salicylic acid. (Berlin. Klin. Wochens., xiii. 504.) If, as is believed by Senator, the activity of salicin depends upon its conversion in the blood into salicylic acid, it is plain that its action should be slower and more uncertain than that of the acid. Further investigations are necessary before any conclusion can be reached; but the later evidence does not seem to be so favorable to salicin as do the reports of Maclagan and Senator. In regard to the dose employed, it is worthy of remark that no serious symptoms have been reported as produced by salicin. Senator recommends two to two and a half drachms as a moderate dose for the adult. Maclagan used much smaller doses, -twenty grains every three hours.\*

Borax has long been used as an application to aphthous and other ulcerated conditions of the buccal mucous membrane; but it has only very recently been suggested as an antiseptic agent. Concerning its poisonous influence upon the lower forms of life there can be no doubt. Sprinkled as a powder in cupboards, etc., it is very largely used by housewives to kill roaches, and seems to be the most effectual of all remedies against these pests. No trials have ever been made as to its power of killing lice, but its freedom from toxic and irritant action would make it a valuable remedy, if found as efficient against these as against other vermin. In 1874, Dumas and Schnatzles called attention to

its action upon infusoria (Pharm. Journal, April, 1874), and in the experiments of Bucholz (Arch. Exp. Path. und Pharm., Bd. iv.) it was found that 0.75 per cent. of it was enough to prevent the development of bacteria. Prof. Lister, Mr. Godlee, and others, in 1874 commended the use of borax in the ordinary method of antiseptic surgery, and in the London Lancet for May, 1876, Mr. Cane affirms that the best results are obtained by using a dry dressing of prepared lint made by saturating patent lint with a saturated solution of borax in boiling water. The wound being brought together in the usual way, this lint is simply secured tightly over it and the dressing allowed to remain undisturbed for several days before renewal. The trifling cost of borax, the simplicity of the method of using it, and its asserted freedom from irritant properties, demand very strongly a thorough testing of the claims set forth by Mr. Cane. In regard to the action of large doses of the borates upon either the human system or the higher forms of animal life, we have absolutely no knowledge.

## PROCEEDINGS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF PHILA-DELPHIA.

THURSDAY EVENING, NOVEMBER 14, 1878.

THE PRESIDENT, DR. H. LENOX HODGE, in the chair.

Tumor of the brain, involving portions of the first and second frontal convolutions, convolution of the corpus callosum, and corpus callosum. Presented by Dr. Charles K. Mills.

THE following case is worthy of study as a remarkable example of brain tumor, and it is also of special interest, owing to its situation, at this time, when the localization of cerebral functions and lesions is attracting such wide-spread attention.

R. D., act. 35, a house-painter, was admitted to the Philadelphia Hospital, September 16, 1878. He was an active local politician, and for a few years had been intemperate. Six years before coming under observation he had had a chancre, which was not followed by secondary symptoms. Fifteen months before, while intoxicated, he had fallen from a high doorstep to the street, striking on his head. He was first known to be sick about two months subsequent to this accident, when, after a spell of heavy drinking, he was attacked with vomiting and severe headache.

<sup>\*</sup> Consult also Ringer, Foster, British Medical Journal, ii. 1876; Brown, Boston Medical and Surgical Journal, February, 1877.

After this his health began steadily to decline. For about nine months before coming under my care he was an inmate of the Pennsylvania Hospital. Some facts of interest in regard to his previous history were obtained

from his friends, as follows:

He suffered from persistent headache, aggravated at night. He had apparent loss of power in the limbs, particularly of the left side. His sight gradually failed, until he became blind, first in the right eye, and afterwards in the left. Mental hebetude and uncertainty, with some tendency to hallucinations, had been observed. Spasmodic contractions, especially in the muscles of the neck, forearm, and eyes, had been noted by some of his physicians. Oscillation of the eyeballs, or nystagmus, had also been a symptom. He had had involuntary discharges. Some interesting negative points were the following: vomiting had never recurred; he had not had marked fever; he had no history of aphasia, vertigo, or convulsions; and no paralysis of the muscles supplied by cranial nerves had ever been present.

After admission to the Philadelphia Hospital he was carefully examined by me on a number of occasions. He usually lay in a fixed position on his back, his head thrown backwards, and his face looking upwards and forwards. He was not emaciated, the muscles generally being in fair condition. Fæces and urine were passed involuntarily. His bowels, however, usually remained closed for two or three days; but when opened, he did not appear to be aware of the fact. He would eat and drink at any and all times, and was never satisfied. None of the facial muscles were paralyzed. He protruded his tongue, which was red and corrugated, in a slow and hesitating manner. Smell was defective, but taste seemed to be preserved. He was blind, and suffered considerably from ocular trouble.

Dr. E. O. Shakespeare, ophthalmologist to the Hospital, was called in to examine and care for his eyes. Through his kindness, I have the following report: "At my first examination the condition of the patient's eyes was as follows. Both eyes were wide open. He had no perception of light. The movements of the lids and balls were preserved. The bulbar conjunctivæ were very slightly injected, the corneæ clear. The pupils were moderately and symmetrically dilated; they did not respond to varying quantities of light. The sensibility of the corneæ was possibly a little lowered. The ophthalmoscope determined the media to be clear, the outline of the papilla in each eye to be invisible, and the discs to be greatly swollen and of an opaque, yellowish-white color. The surface of the latter, and of the surrounding retina, was spotted with numerous minute linear and punctate hemorrhages. The arteries of the disc and retina were a little smaller than normal, and wavy in their course, here and there curving

down among the opaque fibres and becoming invisible. The veins were very full and tortuous; they also were frequently lost to sight where they plunged deeply into the opaque nerve or retina. Great difficulty was experienced in getting a view of the fundus, on account of the movements of the eyes and the head of the patient, who had to be examined while in the recumbent posture. For these reasons the prominence of the optic papillæ could not be measured.

"Ten days after the foregoing notes were taken, the central corneal epithelium of the left eye became hazy, the whole bulbar con-This condition junctiva much congested. soon developed into a severe superficial corneitis, which was mainly limited to a central area of an extent about equal to three-fourths of the diameter of the cornea, which threatened to slough, a narrow peripheral ring of the cornea being comparatively unaffected. At the same time the engorgement of the bulbar conjunctiva increased. The sclera, the iris, and the deeper parts were apparently not involved in the inflammatory process. progress of the keratitis was kept pretty well under control by the use of atropia, of a hot chamomile poultice applied for fifteen min-utes every four hours, and of a compress-bandage during the intervals. The condition of the right eye had not visibly changed since the first examination.'

I have nothing to add to these notes of Dr. Shakespeare, except that the eyes remained in about the same condition described in the latter part of the report until the death of the

patient.

He retained all movements of both hands and arms, but they were wanting in strength and accuracy. The left arm and hand were weaker than the right. With the left hand he marked 5° on Mathieu's dynamometer, with the right 25°; but these numbers probably did not represent with exactness his grip, as he could scarcely be made to understand what was desired of him. He frequently carried both hands to his forehead, and he was sometimes found fumbling with one or both about the penis or scrotum. His legs were usually kept extended and motionless, but sometimes they were found drawn up, with the thighs semiflexed on the body, and the legs on the thighs, when they could only be straightened with difficulty. I could not succeed in making him kick or perform any movements with his legs or feet, although they would sometimes move as if by accident. On taking hold of them, and attempting flexions, extensions, etc., he would appear to resist such exertions with much force. Farado-contractility was retained.

Sensation did not appear to be affected, although exact determinations were difficult,

owing to the patient's condition.

The psychical manifestations were among the most important features of the case. Although comparatively uneducated, he had been when in health intelligent and energetic. He had never during his illness had the gay humor or delirium of grandeur seen in the general paralysis of the insane. His condition, on the whole, was one of intellectual slowness and uncertainty. He seemed to have great difficulty in receiving mental impressions and in directing the movements of his body. His faculty of attention was, in great measure, destroyed. It could only be fixed, and then but partially, by distinctly and vehemently repeating a question or command. He could hear, but it was necessary to make a tremendous external impression on his sense of hearing in order to call out a mental response. He sometimes appeared to me like a man dazed by a great catastrophe which he could not understand.

He was not aphasic, although he manifested certain striking peculiarities of speech, or, rather, of the manner of speaking. What he said, either spontaneously or in answer to questions, was spoken clearly and distinctly, and in a firm, loud voice. His sentences were short, but complete; neither words nor syllables were omitted; and he made no mistakes in articulation, enunciation, or pronunciation. In answering he did not seem to be able to retain for any length of time a hold upon the same idea or to follow a particular train of thought. He did not wander from one subject to another, but he would suddenly stop speaking, as if unable to go further. Often on being questioned he would try to reply, and, after a sentence or two, would sob and burst into tears like a violently hysterical woman. He would at times have what might be termed volcanic outbursts of speech. When all was perfectly quiet in the ward, he would suddenly explode with a sentence or two, and then again subside into stillness. Exclamations of this kind might be repeated at intervals of a few minutes for hours together, or they might recur only at intervals of hours. Sometimes what he said would be connected with some past events of which he seemed to have a vague recollection; often it would be a demand for something to eat or drink; and often, again, it would be a paroxysm of profanity.

His pulse ranged, for the most part, between 78 and 100, varying with the temperature,

which will be referred to hereafter.

In regard to treatment I will be very brief. The fact that the man was doomed was, of course, at once recognized. He had before coning into my hands been treated heroically, but without avail, with iodide of potassium. My efforts were directed particularly to making him comfortable,—to relieving his headache, quieting his mind, preventing bedsores, and caring for his eyes. Blood was taken from the temporal regions by means of leeches. Bromide of potassium was used in large doses. Cannabis indica, both in the form of tincture

and alcoholic extract, was administered. Morphia was also employed at intervals. Solutions of sulphate of atropia were chiefly relied upon in treating the inflamed eyes.

He gradually grew weaker and less demonstrative, and died quietly, apparently from

exhaustion, October 16, 1878.

A post-mortem examination was made six hours after death. The body was not emaciated. No external appearances of interest were noted, except an opacity of the left cornea. No abnormalities of the skull, or of the soft parts covering it, were discovered. A large quantity of blood poured from a point just anterior to the middle of the longitudinal fissure. The cerebral veins and sinuses were filled with blood. Superficially everywhere were evi-

dences of true congestion.

Looking at the brain from above, a large, bloody-looking tumor was seen lying ob-liquely across the right frontal lobe, in a direction from before backwards and from without inwards. It was so situated that it had involved and destroyed, in its process of growth, the anterior upper half of the first frontal convolution, and the anterior upper and inner half of the second frontal. It had also removed a small segment of the gyrus fornicatus, or convolution of the corpus callosum just where it bends around the genu of the corpus callosum; and, finally, a low stratum of the tumor had invaded the anterior portion of the corpus callosum itself, for a distance of half an inch, the diseased mass barely touching the inner side of the gyrus fornicatus of the opposite hemisphere.

The tumor was overlapped towards the outside and posteriorly by portions of the first and second frontal convolutions, and it did not, therefore, encroach upon either the third or the ascending frontal convolution. greatest height was at about the line of the upper frontal fissure, which separates the first and second frontal convolutions, where it was on a level with the surface of the convolutions of the opposite side. The hemispheres were thrust widely apart, especially towards the front. The membranes over the tumor were destroyed. On turning the brain over, and examining the base, no signs of the growth could be found. The contours of the gyrus rectus, or first frontal convolution below, and of the second and third convolutions inferi-

orly, were preserved.
On closely examining the tumor after removal from the brain, it was found to have an irregularly nodulated or lobulated surface and pyriform shape, its small end constituting the part which had extended to the anterior part of the corpus callosum. On making a central incision lengthwise, it was found to be very firm, dense, and resisting, and the cut surface presented a mottled, reddish appearance. It measured three and one-half inches in length, by three inches in width and two and one-half inches in depth.

No evidences of meningitis were found, although the pia mater was somewhat injected, especially near the tumor. Nothing abnormal was discovered in connection with any of the cranial nerves, except the optic, which will be referred to later. The lateral ventricles and the fourth ventricle contained a few drops of blood. The choroid plexus and vessels of the velum were engorged and of a dark-The corpora striata and optic thalami, particularly of the right side, were congested, vessels standing out very prominently. The tubercula quadrigemina were red. The brain, as a whole, was firm and consistent. It weighed, including the tumor, the unusual amount of sixty-two ounces. The weight of the tumor was seven ounces. The pons, medulla oblongata, cerebellum, and parts of the brain not mentioned above showed nothing abnormal. In comparison with the general cerebral mass, the cerebellum was smaller than usual.

As circumstances which could not be controlled rendered it necessary to perform the autopsy in a limited time, a careful general examination of the body could not be made. The lungs, however, were found to be healthy, and the heart large and surrounded by an unusual amount of fat, but it showed no valvular lesions.

A fragment of the tumor, and the eyes, which were carefully removed, were referred to Dr. E. O. Shakespeare. Sections of the tumor were also examined by myself.

Dr. Shakespeare made the following report: "Thin sections of the tumor, after staining with carmine and mounting in glycerin, when placed under the microscope showed a ground formed entirely of bundles of white fibrous tissue running in various directions. The small quantity of loose connective tissue between the bundles exhibited an abundant infiltration of embryonal cells. Between and upon the fibres constituting the bundles, the flat cells normally found in such position were in a slight state of proliferation. were rather more numerous and were more swollen than usual, but when seen in profile they appeared thin and spindle-form, and when viewed in face they were seen to be flat. The blood-vessels were not numerous; their walls preserved a greater abundance of cells than do those of normal tendinous tissue. The growth in question was, therefore, a fibroma, whose tissue was in a state of hypernutrition, that is, that of irritation or increase.

"Microscopical examination of the pons and medulla oblongata determined unmistakably the presence of degenerative changes,

chiefly sclerotic.

"Sections of the outer half of the cornea of the left eye, made vertical to the surface of the cornea, proved the ciliary body and iris to be normal; as was also the sclera, excepting that the vessels which form an anastomosis near the rim of the cornea, between the vessels of the sclera and those of the conjunctiva, were slightly engorged. the conjunctiva were greatly engorged, and the conjunctival connective tissue near the vessels was the seat of a slight cell increase. A small distance within the rim, the cornea revealed a loss of the anterior layers of the epithelium. The deep layer of cylindrical cells was ruptured here by a line, two or three rows deep, of embryonal cells and pus-corpuscles. The corresponding anterior layers of corneal fibrous tissue were softened, and their corneal spaces were occupied by two, four, or more embryonal cells in a state of fatty degeneration. The posterior layers of corneal fibres were apparently not invaded

by the morbid process.

"Sections from the posterior part of the eye, at the entrance of the optic nerve and parallel with its axis, showed the sub-vaginal space much widened, and only partially filled with the loose cellular tissue usually found in it. This tissue was in a state of active cell proliferation. The optic papillæ were greatly swollen, and their surface was far anterior to the normal level of the discs. The capillary vessels of the discs and the adjoining retina were much more numerous than usual, and were dilated. Their walls and the interfibrillar connective tissue were much more richly supplied with small cells than when in the normal condition. Numerous blood-extravasations were visible. In short, the sections presented those appearances usually encountered in choked disc.

Remarks.—This case may possibly afford some assistance in the solution of the question of the functions of the antero-frontal lobes. Pathology and physiology have not contributed much that is satisfying in regard to this region. In Dr. Bigelow's often-quoted "crowbar case," a bar of iron passed through the left frontal region of the brain, and, it is said, without leaving any special symptoms. Trousseau, according to Ferrier ("Functions of the Brain," p. 125), relates the case of an officer who was shot through the head by a bullet, which traversed the anterior part of the brain, and who yet sustained little or no apparent damage bodily or mentally. The London Medical Record for April 15 and June 15, 1877, contains a résumé by Ferrier of a paper by Charcot and Pitres on cerebral localization (Revue Mensuelle de Médecine et de Chirurgie, January, 1877), in which reference is made to some cases of lesions of the anterofrontal districts, the regions chiefly of the first and second and trontal convolutions. Speaking of the occurrence of wounds of the brain without causing either paralytic or convulsive phenomena, they refer first to the American crow-bar case, and to two similar cases of their own. A case was reported by M. Marot to the Société de Biologie, in which, as the result of a fracture of the right frontal bone, the upper part of the first right frontal convolution was lacerated. The patient died of pyæmia, without having exhibited motor symptoms. In a case of M. Baraduc's, both frontal lobes were greatly disorganized, the patient losing will-power and spontaneity, going about in a purposeless manner. case of Charcot and Pitres, a clot the size of a nut was situated on the second right frontal convolution, and caused no motor symptoms. In still another, recorded by Andral, softening of the orbital lobule caused general feebleness and defective intelligence, but left motion and sensation intact. From these cases Charcot and Pitres conclude that destructive lesions of the antero-frontal region may exist without producing the slightest motor disturb-ance. They also note that these lesions cause no secondary degeneration of the spinal cord.

The size, character, and well-defined limits of the lesion recorded in this paper, with the somewhat full clinical history, render the case on the whole, I believe, one of great value in this discussion of the functions of the antero-

frontal lobe.

Much general disturbance of the brain, and compression of parts not affected directly by the tumor, may have been produced by the growth; but, even admitting this, peculiar phenomena, depending upon the position of the mass and the destruction of convolutions caused by it, must. I think have been present.

caused by it, must, I think, have been present. Ferrier ("Functions of the Brain," p. 230), in his experiments on the antero-frontal regions of the brain of the monkey, generally obtained negative results. Electrical irritation usually caused no special manifestations. Removal or destruction was not followed by any defi-nite physiological results. The animals operated on, however, while not actually deprived of intelligence, had apparently lost the faculty of attentive and intelligent observations. When considering the hemispheres psychologically, Ferrier argues also that the power of fixing the attention and concentrating consciousness depends on inhibition. He shows that if the centres of inhibition, and thereby the faculty of attention, are weak, or present impulses unusually strong, volition becomes impulsive rather than deliberate,

It will be observed that the case whose history I have just given presented more pronounced symptoms than those reported by the writers whom I have quoted. The phenomena of the case, however, are to a great extent in accord with those of the cases mentioned, and also with the results of physiological experimentation. Loss of will-power, interference with the faculty of attention, and general feebleness of mind and body, were symptoms presented by my case in common with those recorded by others. Mental impressions were hard to fix, and he could not pursue any train of thought. As we sometimes say, "it took an idea a long while to get into his head." He was emotional and passionate; he spoke and acted impulsively; his voice was loud and monotonous. Such manifestations as headache and choked disc, which may belong to tumor anywhere within the cranium, need not here be considered.

The real or apparent motor-paralytic phenomena exhibited by this case would seem at first sight to separate it from the cases of Charcot and Pitres, and others. His bowels and bladder were opened involuntarily; his legs were usually motionless; both arms, and particularly the left, were weak. I believe, however, from a careful study of this patient's symptoms, that the more or less passive state of motor organs was probably not due to a rupture of the communication between the periphery and actual motor centres, or to a destruction of the latter, but rather to a restraining influence exerted upon these centres by impressions coming from another portion of the brain. In other words, the paralysis, so far as it existed, was inhibitory-motor, and the case points to the probable presence of inhibitory-motor centres in the first and second frontal convolutions.

It must be remembered, in studying this case, that the destruction of brain-substance caused by the tumor was only in one frontal lobe, and that here it was not complete, even as regards the first and second convolutions, the posterior portions which probably establish communication with the true motor centres of the cortex remaining uninjured. A constantly growing mass, inflamed and inelastic, situated among but not entirely destroying inhibitorymotor centres, was an ever-present irritant of the most positive character, from which mandatory impressions were sent by conducting channels still intact to centres of actual motor Movements still retained may have been partly reflex, and partly due to certain inhibitory-motor areas remaining un-

So far as I know, satisfactory experiments have not been performed, and we have no pathological data of value bearing upon the question of the functions of the gyrus fornicatus or convolution of the corpus callosum, an anterior segment of which was destroyed by the tumor. According to Ferrier (p. 145), stimulation of the gyrus fornicatus by slipping insulated electrodes deeply into the longitudinal fissure failed to produce any outward manifestation. Ferrier's experiments on the corpus callosum, which was also invaded by the growth, were likewise negative. The corpus callosum is usually regarded as a system of commissural fibres, connecting corresponding regions of the two hemispheres. The apparent partial involvement of both sides of the brain, as indicated by some of the symptoms during life, may have been, to some extent, due to

the lesion of the corpus callosum.

As already stated, in the experiments of Ferrier electrical irritation of the anterofrontal lobes usually caused no manifestations, but, in an isolated instance, move-

ments of the eyeballs, sometimes laterally and sometimes upwards, were produced. I refer to this exceptional effect in connection with the case, from the fact that the patient

was troubled with nystagmus.

The fact that the *left* eye became so violently inflamed during the last month of the patient's life claims attention, but I have at present no views to advance in regard to the matter. The tumor, it will be recalled, was in the *right* frontal lobe.

The heavy fall upon the head which the patient received may have had something to do with the origination of the growth, but as

to this we can only conjecture.

Fibromata of the brain are rare forms of tumor, and we know but little as to their cause.

In regard to the localization of this tumor before death, the fact that the cranial nerves were not involved would go far towards excluding the base of the brain. Lesions of the corpus quadrigeminum or cerebellum would perhaps, on the whole, cause symptoms most

closely allied to those presented.

In regard to the former, a tumor would not be likely to be limited to this body, and involvements of neighboring parts would have given more distinctive sensory and motor symptoms. Hemiopia, and those peculiar disorders of movement which have led some physiologists to locate the muscular sense in the corpus quadrigeminum, were, so far as I

could ascertain, never observed.

Cerebellar ataxia, or titubation, which, according to Nothnagel (Berliner Klinische Wochenschrift, April 15, 1878), is the only characteristic symptom of disease of the cerebellum, was not present. It was thought by his friends that he exhibited some tendency to fall backwards just before he was compelled to go to bed entirely; but even this could not be clearly made out; and, as Nothnagel has shown, it is a symptom oftener absent than not. Headache, disturbances of the eyes, choked disc, imperfect paralysis, and the early nausea and vomiting might have been present in tumor of the cerebellum or of various other regions. In excluding cerebellar disease I would incline to lay most stress upon the absence of cerebellar ataxia and the peculiarities of the psychical manifestations. Mental disturbance may be caused by a tumor in the cerebellum, but does not present any distinctive features, while, on the other hand, tumors of the antero-frontal lobes will, I think, be found-if the cases be studied carefullyto give intellectual symptoms of a tolerably constant character. The importance of an exact and systematic study of psychical phenomena in localizing cerebral lesions is greater than we usually suppose.

Observations were made both in general

and in local or cerebral thermometry.

The following were the morning and evening temperatures, taken in the axilla, during the four weeks preceding his death:

Sept. 18, mo	rnin	g, 98.6°;	evenir	ng, 99.9°.
" 19,	44	07.8°:	4.4	100°.
". 20,	66,	07 80 .	6.6	98.3°.
" 21,	**	$08^{\circ}$		99.8°
" 22,	64	98°;	44	97.5°
	46	97°;	6.6	99.1°.
<sup>2</sup> 3,	66	97°;	66	99.1 .
24,	66	90;	66	98.9°.
25,	44	99°;	"	100.8°.
20,	66	98.5°;		99.1°.
" 27,		97.4°;	**	99.6°.
28,	"	98.3°;	6.6	99.9°
" 29,	66	97°;	44	99.4°.
" 30,	EE .	o8.7°:	6.6	99.4°.
Oct. 1,	6.6	0780.	66	99.5°.
16 2,	4.6	98°;	4.6	99°•
" 3,	6.6	98.4°:	6.6	100°.
" 4,	4.6	07.6°	((	99.4°•
" <del>5</del> ,	"	98°;	44	99°•
" 6,	**	99·7°;	66	101°.
" 7,	66	99.7°;	4.6	98.1°.
" 8,	4.6	99.2°;	66	101°.
4.4	66	90.0;		101.
9,	66	99.3°;		100.9°.
10,	66	IOI°;	66	101.8°.
11,		99.7°;	66	101°.
12,	6.6	99.4°;		99.6°.
" 13,	6.6	99.3°;		101°.
" I4.	4.6	99°;	**	100°.
" 15,	"	100.3°;	6.6	100.4°.
I shall give	the	a obcari	ations	on dener

I shall give these observations on general temperature without lengthy comments. I have no special knowledge of thermometric investigations in cases of tumor. It will be noticed that on fifteen days the morning temperature was below the standard of health, and also that almost always the evening temperatures were higher than those of the

morning.

Physiological experiments performed by Eulenberg and Landois (*Centralbl. f. Med.*, 1876, p. 260), and by Hitzig (*Centralbl. f. Med.*, 1876, p. 323), indicate the presence in the cerebral cortex of heat-controlling centres. These centres, however, were found, not in the antero-frontal districts, but near the crucial sulcus of the dog, which corresponds to Rolando's fissure in monkeys and man. They were located pretty definitely in the well-known motor regions in the ascending convolutions. In general terms, destruction of the thermic area caused elevation and irritation produced lowering of temperature in the opposite extremities. When, in the experiments of Eulenberg and Landois, irritation with strong induced currents was continued for a long time, constant temperature-reduction could not be obtained, irregular oscillations ensued, and sometimes even a small temperature-increase would take place, lasting, according to circumstances, for a shorter or longer period. Whether the lowering and irregular oscillations of temperature in this case of tumor were produced by general cerebral disturbance, or by the effect of pressure upon the not remote heat-centres, I merely present as a question for consideration.

Six stations on the head were selected, and local temperatures were carefully taken under my direction, on seven successive days, from September 23 to September 20, by Dr. Thompson, one of the resident physicians at the Philadelphia Hospital. The instrument used was Seguin's surface thermometer. The observations were made between the hours of three and five in the afternoon. The points or stations at which the temperatures were taken were as follows: I, a middle frontal station, in the centre of the forehead; 2, a middle occipital station, in the centre of the occipital region; 3, a right frontal station, near the external angular process of the frontal bone: 4. a left frontal station, similarly located on the left side; 5, a right parietal station, above the right ear; 6, a left parietal station, above the

The results of the observations are given in the following table, in Fahrenheit degrees:

	Middle frontal station.	Middle occipi-	Right frontal station.	Left frontal station.	Right parietal station.	Left parietal station.
September 23,	95° 95 98.6 96.8 96.8 96.8	94.1° 94.1 95.9 95.9 95.9 96.8 96	95° 93.2 96.8 95 95 95	93.2° 94.1 95.9 95 94.1 95.9	94.1° 91.4 96.8 95 95 96 95	93.2° 93.2 95.9 95.9 94 95
Average temp.	96.5	95.5	95	94.7	94.7	94-4

The temperature of the room during these observations was kept at about 70°. The axillary temperatures ranged between 98.9° and 100.8°, averaging about 99.5°. Examination of this table shows several points of considerable interest, before referring to which, and in order that they may be more clearly understood, I will allude briefly to the general sub-

ject of cerebral thermometry.

In 1877, M. Broca laid before the French Medical Association at Havre the results of some investigations on the temperature of the surface of the head in health and in disease, an abstract of which was published in the Lancet for October 20, 1877. Observations were made on twelve individuals, and temperatures were taken on different regions, -frontal, temporal, occipital, etc. Some of his results in healthy individuals were as follows: maximum temperature of the head, 94.73° F.; minimum, 91.04°; giving a mean of 92.87°. The thermometers applied on the left side invariably registered higher than those of the right, when those examined were in the resting state. The frontal region gave an average temperature of 95.5°; the temporal, 92.69°; and the occipital, 91.25°. He also reports the results of some observations on cases of em-

bolic hemiplegia.

At the meeting for 1878 of the American Neurological Association, Dr. Landon Carter Gray, of Brooklyn, read a paper on Cerebral Thermometry, an abstract of which appears in the Journal of Mental and Nervous Diseases for July, 1878. His right and left frontal and parietal stations were the same as those selected in my observations. Occipital stations were taken on each side of the occiput, and four vertical stations around the fissure of Rolando. I will give some of Dr. Gray's conclusions. He found the average temperature of the left frontal station to be 94.36°; of the right, 93.71°; of the left parietal, 94.44°; of the right, 93.59°; of the left occipital, 92.66°; of the right, 91.94°. Alterations of more than 110 he looked upon as suspicious of abnormal change at the point where the temperature was taken; more than 2° he considered strong evidence of such change. He mentions a case of glioma located during life by the thermometer, the autopsy confirming the determination.

Comparing the observations made on the case reported in this paper with the results obtained by Broca and Gray, we note several facts of peculiar interest. The temperatures generally were higher than those obtained by Broca and Gray on the heads of healthy sub-The average temperature of the right side of the head, as determined at the right and left frontal and parietal stations, was slightly higher than that of the left, the latter in health being usually the higher. The highest average temperature was that obtained at the middle frontal station, which, from the location of the tumor in the anterior inner part of the right frontal lobe, would probably be, of the points taken, the one most closely related to the intra-cranial growth. The mean temperature of the right frontal station, which was next in proximity to the tumor, was also slightly higher than the temperatures of the other lateral stations. The average of the middle frontal station was nearly four degrees higher than that of the whole head, which, according to Broca, is 92.8°, and according to Gray, 92.6°. On one day, September 25, this region gave 98.6°. The middle occipital temperatures were also high, the mean of the seven observations coming next to the middle frontal. The fact of the patient constantly lying in one position on his back, and also that the occipital station corresponded nearly to the confluence of the sinuses in a congested brain, may have had something to do with this result. In the observations of Broca and Gray, the occipital temperatures, taken laterally, were lower than the frontal and parietal. On the whole, I believe that the observations on this case show that we can attribute a positive value to local thermometry in the regional diagnosis of intra-cranial tumors. The in-

ference would seem to be that, in cases like the one here reported, the temperature of the surface near the seat of the growth is higher than that of other regions. The average temperature of the middle frontal station was  $1\frac{1}{2}$ °, or more, higher than that of other stations, except the occipital, and it was even 1° above this. The temperature of the side of the head in which a tumor is located would also appear to be greater than that of the other side. Broca's observations on embolic hemiplegia. he found the temperatures lower over the territories supplied by the occluded vessels. this being probably due to the anæmia here produced, and to the compensatory hyperæmia in the other regions. In cases of tumor we have hyperæmia and inflammation most marked in the side of the tumor.

Tumor of the brain. Presented by Dr. J. T. ESKRIDGE.

I am indebted to Dr. Henry W. Rihl for the clinical history of the following case.

"From Wm. S., æt. about 44, married, below medium height, with large head and broad shoulders, having a weight of about one hundred and eighty pounds, I obtained the fol-lowing history. He had been for several years free from sickness of any kind, although he had several severe falls on the head in the past year, and, on close questioning, admitted having had a recent chancre, which was fol-lowed by secondary symptoms a few weeks before I saw him, but positively denied ever having had a previous attack of syphilis. In the latter part of April, 1878, he was troubled with headache, for which he consulted several physicians; he, however, was not confined to his bed till a few days before my first visit, June 25, 1878.

"He then complained of great headache (worse anteriorly, and most intense, when present, throughout his illness, in the right supraorbital region), obstinate vomiting, some giddiness, frequent attacks of hiccough, and

inability to sleep well.

"The thermometer in the axilla throughout his sickness showed no increase of temperature. Under treatment, his headache subsided, to recur only occasionally, sleep returned, and nausea, vomiting, and hiccough

"Ten days after my first visit, Dr. Da Costa saw him in consultation with me. He then, or soon after, had less power on the left side than on the right, though the right seemed to be below normal; locomotion soon became difficult; he was unable to walk or sit without some support, was slow in his answers, and indisposed to talk. Dr. Da Costa, on the fifth day after he first saw him, detected chokedisk, and pronounced it a case of pressure of the brain, produced either by a tumor or by meningitis. Dr. Da Costa saw him till about the thirty-second day of his illness, when he had a mild dementia, being possessed with the idea that he was away from home.

"About the forty-first day of his sickness, after a two weeks' absence, I again saw him, and Dr. Updegrove, who had visited him in my absence, thought he had fever part of the time, though he did not use the thermometer. In some respects there was at this time marked improvement. Previously to my absence he had been troubled with involuntary evacuations. These had now ceased, and he could walk across the room with but little aid: his mind was now comparatively clear; there was no stupor; he began to be anxious about his condition, and to inquire concerning his business, which he had not done almost from my first visit in June.
"While these symptoms were more or less

favorable, about this time others of a less favorable character arose. His headache, which had ceased for several weeks, again tormented him, sleep was poor, and his vision rapidly grew dimmer and dimmer, till about the sixty-fifth day of my attendance—fifty days after Dr. Da Costa had detected choke-disk. and three weeks after he first complained of dimness of vision—he was completely blind.

"His urine, in the commencement of his attack, contained an abundance of phosphates, and early in September it was very copious, and so continued till near his death. passed, according to his wife's statement, four chamberfuls per day. September 15 its specific gravity was 1003; it was then almost colorless. September 25 the specific gravity was 1005. On the last date, and again on October 7, Dr. S. Weir Mitchell saw him with The improvement in locomotion which had occurred a few weeks previously only lasted a short time, and his mental condition, though less favorable, never became so bad as it had been at the beginning, till within a few days of his death, when he fell into a profound stupor, and his evacuations again became involuntary, but his appetite remained good throughout his disease, and was at times ravenous.

"During the last few weeks of his illness his head was inclined to the right side, and an attempt to carry it to the median line, or beyond this to the left side, gave rise to considerable pain.

"He died quietly, October 11, 1878.

"Autopsy, thirty-four hours after death, was made by Dr. Updegrove and myself. The body was very fat, and contained considerable adipose tissue. The skull-cap, over the right supraorbital region, was nearly twice as thick as usual. Brain and its coverings.—The dura mater, over the anterior portion of the right parietal lobe, and over the posterior portion of the right anterior lobe, was greatly thickened and firmly adherent to the bony surface above it. On removing the dura mater, a small, yellowish, softened mass of brain-substance, about the size of a hickory-nut, was found in the upper portion of the ascending parietal convolution of the right side. The

remaining convolutions of the upper and convex surface of the brain seemed healthy. The arteries and veins at the base of the brain appeared normal, as did also the whole of the left hemisphere, both at its base and in its substance. The base of the temporo-sphenoidal lobe and posterior base of the anterior lobe of the right side were decidedly softened. This portion of softened brain-substance was about the consistence of an ordinary poultice, and would ooze between the fingers on removing the pia mater. On cutting into the temporosphenoidal lobe of the right side from below, a large cavity or abscess, containing about an ounce of yellowish serous fluid, was found extending upward into the substance of, and scooping out the base of the ventricular portion of, the right corpus striatum, thalamus opticus, and encroaching upon the anterior portion of the internal capsule. There were several other smaller cavities in the anterior portion of this lobe, all apparently communicating with the main cavity. To the outer side of and above this large cavity there was a tumor of considerable size buried in the white substance of the right parietal and frontal lobes, but not, so far as I could detect, involving the convolutions of the anterior lobe, but involving the ascending parietal. Another small abscess was found at the base and posterior part of the right anterior lobe. A small cystic tumor was found on the choroid plexus of the posterior cornu of the left lateral ventricle, and a larger and a smaller one were found on the choroid plexus in the posterior cornu of the right lateral ventricle. The largest of these cystic tumors was nearly the size of a small hickorynut, the smallest, that of a pea. Remaining portions of the cerebrum, the cerebellum, pons. and medulla appeared healthy to the unaided

eye.
"Chest and Abdomen.—Both lungs congested; heart healthy; kidneys smaller than usual, and the left contained a calculus. Spleen-substance, with exception of containing a small whitish body, appeared healthy;

liver healthy."

Microscopic Examination of the Tumor, by Dr. L. B. Hall.—"The tumor consists of spindle-shaped cells with nucleus and nucleolus. Some of the cells are elongated, forming bands or trabeculæ surrounding the shorter or more nearly round cells. From the structure of the sections I have made, it is a sarcoma, and not a glioma."

Dr. Rihl, in a note to me, states, "Though some of his friends thought they had noticed a change in his temper—being morose and irritable—for nearly a year prior to his illness, yet I was unable to detect it, although I saw him quite frequently." He also states, "The rapidity of its course and the polyuria were marked features of the case, the latter being, so far as I can discover, not a usual symptom of brain tumor. Dr. Da Costa suggested that 'this might be due to the disease

encroaching upon the floor of the fourth ventricle."

In answer to my questions, Dr. Rihl said there were no convulsions, no disturbance of sensation, so far as he could determine, no paralysis of any of the cranial nerves, no ocular symptoms other than blindness and a staring and fixed appearance of the eyeballs, no psychical phenomena but that mentioned in the history, and the pain was not severer at night than during the day, but there was intense thirst almost throughout his entire' illness.

So far as I can learn, no attempt was made during life to locate this tumor, and its chief interest seems to be in the destruction of so large an amount of brain-substance in a region of the brain of which we know so little. The paralysis in the left arm and leg was never complete, but was much more marked in the leg than in the arm. This difference in the leg and arm may be accounted for by the softened mass of brain-substance which involved or encroached upon the *leg centre* in the an-

terior portion of the parietal lobe.

Report of the Committee on Morbid Growths.

"The specimen of brain tumor presented by Dr. Eskridge, and referred to the Committee on Morbid Growths for examination, was not in a very satisfactory state of preservation for histological study: however, it was determined to consist in part of degenerated brain-substance, and in part of a new formation composed of large spindle-shaped cells containing large nuclei, with a scarcely evident intercellular substance. The neoplasm presents the character of a large-cell spindle-cell sarcoma.

"December 12, 1878."

(To be continued.)

#### PHILADELPHIA COUNTY MEDICAL SO-CIETY.

A T a conversational meeting, held December 11, 1878, Dr. Henry H. Smith, President of the Society, in the chair, Dr. Goodell read a paper entitled "Vegetations of the Endometrium," which received a vote of thanks from the Society. (See p. 169.)

#### Treatment of menorrhagia.

Dr. Lewis D. Harlow, in opening the discussion, remarked that he had noticed a form of uterine hemorrhage coming on in the course of a few days or weeks after miscarriage or childbirth. Following this the menstrual function is irregular and the flow profuse and exhausting. In such cases the effect of the administration of ergot, aromatic sulphuric acid, and astringents is slight, unless aided by intra-uterine applications. For this purpose he had formerly been in the habit of using Monsel's solution (diluted with fifteen parts of water), but he now prefers the solu-

tion of the chloride of iron (liquor ferri chloridi, U.S.P.), full strength. When the uterus is large and the os patulous, he had found fifteen or twenty drops of the iron carried into the uterine cavity by means of a syringe to be very efficient. The injection should be slowly made, so as to introduce the fluid drop by drop, and should be employed once or twice a week until the cure is effected. Three or four applications generally suffice. In making such an injection, the precaution should be observed of having the os sufficiently open to permit the egress of the fluid: to secure this the introduction of a spongetent will be found necessary in some cases. Performed in this manner, the application is generally painless; it arrests the flow, and causes contraction of the uterus. there be any pain, an opium suppository will relieve it.

In cases of ordinary menorrhagia the same treatment, by dilatation and astringent intrauterine applications, he had found to be very efficient and satisfactory.

Dr. Charles B. Nancrede stated that sarcomatous invasion of the uterus is more malig-

nant than epithelioma.

The lecturer replied that remedies appear to do more good in uterine sarcoma than in epithelioma of the cervix; at least the patient's life lasts longer. Round-celled sarcoma is either a rare disease in connection with the womb, or it has heretofore largely escaped notice. In only about twenty cases of this form of sarcoma thus far reported, contrasted with an equal number of epithelial cancer, the treatment was longer in the former.

Scraping the mucous lining from the womb does but little harm. Even where this has been repeated and fuming nitric acid applied, pregnancy has occurred. One of his patients bore two children after such operations; and

three others, one child apiece.

He was reminded by Dr. Harlow's remarks that he had not laid sufficient stress on placental vegetations, for which the same plan of treatment has been found successful as he had mentioned in the paper of the evening. In making intra-uterine applications with a syringe, he was in the habit of introducing the nozzle between the blades of a dilator, which insured the free escape of the fluids. Collapse and colic after an injection may be explained by the occurrence of a contraction of the internal os, preventing the fluid from flowing out: this excites uterine contraction, which forces the solution either through the Fallopian tubes or into the uterine sinuses, perhaps leading to cellulitis or peritonitis.

In reply to a question from the Chairman, he stated that he had not used the chloride of zinc solution for intra-uterine injections.

Dr. A. Fricke presented to the Society photographs of a well-marked case of syphilitic rupia in the person of a young man. He

was entirely relieved by a course of tonics with mercurial inunctions.

Dr. C. Seiler exhibited a pair of scissors for cutting off an elongated uvula, which in his opinion possessed many advantages over the ordinary guillotine.

#### REVIEWS AND BOOK NOTICES.

THE PATHOLOGICAL ANATOMY OF THE EAR. By HERMANN SCHWARTZE, M.D., Professor in the University of Halle-on-the-Saale. With the Author's Revisions and Additions, and with the Original Illustrations. Translated by J. ORNE GREEN, A.M., M.D., Aural Surgeon Boston City Hospital, etc., etc. Boston, Houghton, Osgood & Co., 1878, pp. 174, 8vo.

We regret that our allotted space will not permit as long a review as we should like to give, and which should be given, of this most instructive book. As is said in the translator's preface, so can we most heartily say, "It is essentially a hand-book on the subject of which it treats, a small amount of space sufficing to give the results of researches the laboriousness of which can only be appreciated by those who have been engaged in similar work."

Although this book will be invaluable to specialists in aural surgery, it is filled with facts which every general practitioner of medicine ought to know, and which he must know if he intends to form a correct diagnosis in many cases of aural disease which will arise in his practice. Whether he desires to treat such cases or not, he cannot be relieved of a duty imposed on him by the very nature of his position as family adviser, and which obliges him to make a correct diagnosis and to inform the patient or the patient's family of the true nature of the aural disease in which he may find the sufferer.

The portion of this book which treats of caries and necrosis of the temporal bone should be read and remembered by every man who calls himself a doctor of medicine. No book since Toynbee's has contained so much pathology, and this book of course has the advantage not only of Prof. Schwartze's wide experience, but is also enriched by the large number of references to work done by other men, chiefly in Germany, since Toynbee's time. It might perhaps be said that the labors of Americans and Englishmen hardly get their share of acknowledgment in this erudite compendium from the pen of the professor of Halle, so justly celebrated for his otological knowledge. The French are generously referred to. The book is written in a succinct and very clear style, closely and successfully followed by the translator, and is indeed an encyclopædia of pathological facts pertaining to the ear, now placed within easy reach of

all English-speaking physicians. The book is rich in figures, sixty-five in number, remarkable for their variety, beauty, and accuracy. As examples of good drawing may be cited Figs. 5 and 9, in which the erosion of the temporal bone is most skilfully given by the artist, and Fig. 27, in which the appearance of exostosis of the external auditory canal is admirably rendered. Fig. 54, however, has decidedly lost accuracy by being transplanted from American soil (Roosa's Treatise on the Ear) to German territory. Of course the source of the figure is duly acknowledged by the author. It illustrates a rare instance of fracture of the malleus, originally reported by Dr. Weir, of New York

Since upon every one of the one hundred and seventy-four pages of this work more than one fact might be picked out and laid before the readers of this journal for their instruction, it is no easy task to decide which of these should be put down here in our necessarily short review. It would not, therefore, be asking too much if to the readers of this notice we should recommend reading every page of this book, which, indeed, is the only work strictly devoted to the pathological anatomy of the ear; it is, in fact, the sixth part of Klebs's "Manual of Pathological Anatomy." The science of medicine is under obligations to Prof. Schwartze for having bestowed so much telling labor on his book. The author has been extremely fortunate in his translator, to whom the thanks of his countrymen are due for his conveying to them so much information from German sources; and the American publishers of the book have done their work in the exquisite manner for which they are justly renowned.

## GLEANINGS FROM EXCHANGES.

AMPUTATION OF ARM FROM COMPOUND COMMINUTED FRACTURE—LABOR TEN HOURS AFTER OPERATION-RECOVERY (The British Medical Fournal, October 5, 1878).—Mr. A. B. Vesey reports the case of a woman, aged 35, who was admitted into a hospital in an extreme state of collapse, and quite delirious, having had her left arm "shattered" up to above the elbow-joint in the rollers of a flaxmill about eleven miles distant from town. She had evidently lost blood in considerable quantity, and on examination was found to be far advanced in pregnancy; but this she totally denied. Reaction having set in next morning, the limb was removed at the middle third by the ordinary circular operation. Chloroform was not given. A flannel-and-calico bandage was used as a substitute for Esmarch's bandage, which answered the purpose re-markably well. It was of importance in this case that as little blood should be lost as possible. After the patient was removed to bed, an opiate was given; but it was remarked by the nurse that soon after the operation she became extremely restless and excited, but never gave any other indication of being in labor. In the evening she said she was doing well, and did not complain of pain; and her pulse was quiet. Two hours after, she insisted upon getting out of bed, but was restrained from doing so. It was then evident that she was in labor, and could not conceal the fact any longer; and at about 9.30 P.M. (ten hours after operation) she was delivered of a son, the patient lying on her back. The placenta came away soon afterwards. There was no hemorrhage from the stump.

It is unnecessary to give a daily account of the case: suffice it to say, she made an uninterrupted recovery, and suckled her child. It may be added that she has since said that labor commenced immediately after the operation, and she was consequently ten hours ill. She also stated she was about two or three weeks from the full period of being delivered. Both mother and child left the hos-

pital healthy and well.

Instances of Deficient Renal Elimination.—It has been ascertained that in cases of albuminuria the kidneys are impermeable to odors: e.g., turpentine and asparagus fail to communicate their peculiar odors to the urine in such cases. In a recent thesis M. Chauvet has collected observations showing that serious results may follow from active drugs when elimination is defective, and also how the mode of elimination of certain drugs is materially modified by the existence of disease of the kidneys. For example, the elimination of bromide of potassium, which, in a healthy subject, is completed within twenty hours after suspension of the medicine, continues for thirty or thirty-five hours when the kidney is diseased. The susceptibility of albuminuric patients to mercurials is well known to most practitioners.—The Medical Press and Circular.

RISE OF TEMPERATURE AFTER INJURY TO THE BRAIN.—Mr. Lucas recently narrated to the London Clinical Society (British Medical Journal, October 19) the case of a man, æt. 21, who committed suicide by shooting. Two conical bullets were extracted from the internal table after a crucial incision. The longitudinal sinus was seen pulsating, and the dura mater was perforated. The patient lived five days, during which time the prominent symptoms were convulsions, left hemiplegia, gradual rise of temperature to 108.6°. At the postmortem the dura mater was found perforated in one small aperture; suppurative meningitis over the right hemisphere and anterior part of the left hemisphere; also slight bruis-ing of each frontal lobe. In calling attention to this case we would urge upon our readers the importance of observing temperature in all cases of brain-wound.

### MISCELLANY.

EXTRACT FROM A MEMORANDUM OF THE AMERICAN PUBLIC HEALTH ASSOCIATION ON LEGISLATION AFFECTING THE PUBLIC HEALTH .-

I. That while under ordinary circumstances the Association as a Scientific Body should hesitate to take the initiative in urging any specific legislation, yet at the present time it is expedient to state as precisely and definitely as possible our views as to what action should and should not be taken by Congress with regard to the Public Health, seeing that we believe there is great danger of unsatisfactory action on this subject, from want of proper

and sufficient information.

II. That in view of the great diversity of opinion among those best qualified to judge, as to methods of quarantine, and especially as to the relations which should exist between national and local systems of quarantine; of the fact that we have not as yet sufficient information to enable us to formulate any system of National Quarantine which might not do more harm than good; and of our belief that there is a possibility of recurrence of Yellow Fever in the United States during the coming summer, from causes which may have survived from last summer, and which there-fore cannot be prevented by any system of National Quarantine alone; we believe that any legislation, until further investigation has been made, with regard to a National Quarantine, either to provide a new law or to amend or enforce the present one, will be inexpedient

We wish, however, that it shall be distinctly understood that we are not opposed to a National Quarantine System, if carefully elaborated and placed in proper connection with State and Municipal Sanitary Organizations, but we are well satisfied that it is impossible to organize such a system at the present time.

III. That it is highly desirable that Congress shall during the present session provide for the proper organization of a Provisional

National Health Commission.

IV. That the objects and duties of this Commission should be as follows: A. To report to Congress at its next session a plan for a permanent National Public Health Organization, said plan to be prepared after consultation with State Boards of Health and with all those who possess special knowledge or experience bearing on this subject. plan should include one for a National System of Quarantine. B. That it should take charge of any investigations into the causes and means of prevention of Yellow Fever or other epidemic diseases which may be referred to it by Congress, selecting experts for that purpose so far as may be necessary.

One of these investigations, at all events, should be made at some point where Yellow

Fever is endemic, and by experimental methods, as suggested in the report of the Committee on the General Report of the Yellow Fever Commission, presented at the last meeting of the Association.

We do not think that this Commission should be burdened with any administrative duties which are not connected with the investigations just referred to, and it should in no manner be dependent upon, or be connected with, any existing bureau or department of the Government.

V. That it is of the greatest importance that this Commission should be composed of men well known for their scientific attainments and knowledge of Public Hygiene. They should be persons with whom all scientific and professional men of the country will be glad to co-operate and advise; to whom no suspicion can attach that they might consult personal interests or ambitions rather than the public good, and whose opinions when presented after due deliberation will command respect, if not the assent of all well-educated men. Such persons are not common, yet we are well satisfied that they exist, and that their services can be secured for this very important work.

VI. That the proper selection of these men

is a matter of difficulty, and one which will require the greatest care. They can only be selected by some man or body of men competent to judge of their scientific attainments and special fitness. Political or local considerations should have no weight in this matter, nor, unless there are grave legal or constitutional objections, should any officer of the Government be burdened with, or allowed to assume the responsibility of, selecting them. After careful consideration of various plans proposed to secure this end, which is felt by all to be vitally necessary to success, we are of opinion that the simplest and surest method, and the one which will command the most general approval among the scientific and professional men of the country, is that Congress should request the National Academy of Sciences to designate the members of the Commission.

VII. That the number of persons in the Commission should not be less than seven nor more than nine, that they shall elect their own officers, and that their compensation should not be less than ten dollars per day for each and every day that they are engaged in the work of the Commission, besides their travelling expenses. That the Commission shall be authorized to employ such clerical force as may be necessary to carry out its work, and that the Commission shall fix the rates of pay of its employees and of the experts which it may select and employ.

VIII. That an adequate appropriation should be made to meet the expenses of the Commission and of the investigation which may be placed under its direction.

IX. That upon the request of the Com-

mission, the Secretaries of War, of the Navy, and of the Treasury, or of other Departments, and the Attorney-General, shall be authorized to detail officers from their several Departments to aid in the investigation undertaken, the number so detailed not to exceed three from any one Department at the same time.

X. That it is highly desirable that there should be added to the Standing Committees of the Senate and House of Representatives

a Committee on Public Health.

XI. We are entirely convinced that the future of Public Hygiene in this country depends mainly upon the proper organization of State and Local Boards of Health, and upon such recognition of their importance and utility by the people and their legislators, that the necessary means and powers shall be granted to them to enable them properly to perform their duties. We believe that the General Government can do much to stimulate and encourage the formation of such Boards, and that an important part of the duty of the Pro-visional National Health Commission which we have recommended, will be to point out what can best be done to forward this object.

Such Boards can do good work, not only for their own locality, but for the Nation; and if the Nation will pay for this work it will be most cheerfully done, especially if a proper Central Health Organization be arrived at, with which they can co-operate, as we hope and believe will be the case if the plan which

we have suggested be carried out.

XII. In conclusion, we would state that in our opinion the true interests of Public Health and of Sanitary Science in the United States are in grave danger at the present time, and that it is the duty of all professional and scientific men, both as individuals and as members of learned societies, to endeavor to prevent premature legislation, which is now threatened, but which we believe the great majority of our National Legislators will oppose if properly informed upon the subject.

## NOTES AND QUERIES.

A BILL TO ESTABLISH A DEPARTMENT OF PUBLIC HEALTH.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, that there shall be established at the seat of government of the United States a Department of Health, the general design and duties of which shall be to acquire and diffuse among the people of the United States useful information on subjects connected with the public health; to direct the establishment and management of efficient sanitary and quarantine systems and regulations throughout the several States and Territories of the United States; to supervise the Marine Hospital Service, and to organize and direct a corps of sanitary engineers competent to superintend all public works so far as their construction may affect the public health.

SEC. 2. That there shall be appointed by the President, by and with the advice and consent of the Senate, a Director-General of Health, who shall be the chief executive officer of the Department of Health, and who shall receive for his compensation a salary of seven thousand five hundred dollars per annum, and the Director-General of Health may for cause be suspended by the President from the discharge of official duties, or removed from office upon hearing before the Chief Justice of the United States.

SEC. 3. That it shall be the duty of the Director-General of Health to perform all of the duties and exercise all of the powers now devolving upon the Supervising Surgeon-General of the Marine Hospital Service, both in regard to the direction and execution of the laws and regulations governing the Marine Hospital Service, and also in supervising the organization and management of the quarantines of the United States as provided by the national quarantine act, approved April twenty-ninth, eighteen hundred and seventy-eight, and to this end the office of the Supervising Surgeon-General of the Marine Hospital Service is hereby abolished, and all of the duties and powers of that office, together with all of the records, papers, and other matters pertaining to the Marine Hospital Service, are hereby transferred to and shall become a part of the Department of Health.

SEC. 4. That it shall be the duty of the Director-General of Health to make and enforce all quarantine and other regulations for the prevention of cholera, yellow fever, and other epidemic diseases in the United States; and whenever cholera or yellow fever appears in any locality, and information thereof is brought to the knowledge of said officer, he shall prepare and carry into effect such rules and regulations as in his judgment will, with the least inconvenience to commerce and travel, prevent the spread of the disease.

He shall select suitable localities for establishing quarantine stations, and may erect necessary temporary buildings for the

stations, and may erect necessary temporary buildings for the disinfection of passengers, baggage, cargoes, and other matters believed to convey the contagious principle of cholera, yellow fever, smallpox, and other epidemic diseases, and may enforce such transshipment of passengers, baggage, and cargoes as he may deem necessary, and shall assign to the charge of each station a competent medical officer and necessary assistants.

SEC. 5. That it shall be the duty of the Director-General of Health to prepare suitable tables for the taking of each census, the tables to embody such facts relating to births, deaths, marriages, the prevalence of disease, and such other data as will furnish a basis for securing a complete system of registration of vital statistics for the United States.

SEC. 6. That the Director General of Health shall procure information relating to the climatic, meteorological, geological, and other conditions affecting the public health, and shall furnish, on application, all information in his power as to the healthfulness of any given locality, and its prevailing diseases. stations, and may erect necessary temporary buildings for the

SEC. 7. That the Director-General of Health shall have power to employ persons of proper scientific knowledge and skill to make special investigations on subjects connected with

the public health, and may award to them such compensation as he deems reasonable and just.

SEC. 8. That it shall be the duty of the Director-General SEC. 8. That it shall be the duty of the Director-General of Health to make annually a general report, in writing, of his acts, to the President, for transmission to Congress, in which he may recommend the publication of papers forming part of or accompanying his report, and shall make special reports on particular subjects, whenever required to do so by the President or either House of Congress, or whenever he thinks the public welfare demands it, and shall direct and superintend the expenditure of all moneys appropriated by Congress for the support of said department, and shall render accurate accounts thereof.

SEC. 9. That there shall be appointed for duty in said department whatever additional officers are required, including a chief clerk, chemist, engineers, experts, and so forth, whose compensation shall not exceed that authorized for similar officers in the superior of the

compensation shall not exceed that authorized for similar offi-

cers in other departments,
Sec. 10. That all acts or parts of acts inconsistent with
this act be and the same are hereby repealed.

#### OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY FROM DECEMBER 29, 1878, TO JANUARY 11, 1879.

BARTHOLF, J. H., CAPTAIN AND ASSISTANT-SURGEON.—Assigned to duty as Post-Surgeon at Alcatraz Island, California. S. O. 187, Division of the Pacific and Department of California, December 19, 1878.

SEMIG, B. G., FIRST-LIBUTENANT AND ASSISTANT-SUR-GEON.—Now on leave of absence, to report in person to the Commanding General, Department of the South, for assignment to duty. S. O. 7, A. G. O., January 9, 1879.

Rosson, R. L., First-Lieutenant and Assistant-Sur-Geon.—Assigned to duty at Camp Apache, Arizona Ter-ritory. S. O. 149, Department of Arizona, December 23,

Gray, C. C., Major and Surgeon.—Relieved from duty in Department of the Missouri, to proceed to his home, Chester, New York, and there await further orders. S. O. 7, A. G. O., January 9, 1879.

## PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, FEBRUARY 1, 1879.

#### ORIGINAL LECTURES.

#### CLINICAL LECTURE

ON THE STUDY OF UTERINE DIS-EASE; WITH CASES OF OVARIAN CYST AND VAGINISMUS.

BY PROF. T. GAILLARD THOMAS.

(Delivered at the College of Physicians and Surgeons, New York.)

Reported by P. BRYNBERG PORTER, M.D.

I AM not one of those who believe in long introductory remarks, gentlemen, but I cannot refrain from saying a few words to you by way of expressing my pleasure at meeting you at this opening clinic of the regular winter session, and to impress upon you the object of my clinic. and the way to follow it. As a general rule, I find that the student while attending lectures thinks too much about his final examination, and too little about his future career when in the practice of his profession. He is only anxious to "get through," and does not reflect upon the responsibilities and duties which will devolve upon him hereafter. But what you learn here will have but little to do with your final examination. You come to the clinic not so much to learn how to treat uterine disease as how to study it. You will get almost nothing in the way of actual experience here. I want simply to show you how to make a diagnosis in the diseases peculiar to women, which, I do not hesitate to say, requires more skill than in any other class of disease. This is because in these affections the patient, on account of her modesty or her unwillingness to speak of her symptoms and to submit freely to an examination, really fights against the physician's success in making a correct diagnosis. Another reason why so much skill is required is that the organs affected in these complaints are not so open to investigation as others, and no little skill and experience are necessary to find out anything at all about them. There is no class of diseases in which an erroneous diagnosis (or no diagnosis at all) is made so frequently.

You are aware how often the success of a case in court depends on the lawyer's powers of cross-examination; and the same

skill is most useful to the physician. There is the greatest difference in the world in this respect among different members of our profession, and while one will find out everything there is to be learned in this manner, another will find out nothing at all. First of all, then, I wish to show you how to examine a patient by questioning. Every physician should have a system for doing this: not that I mean that each one should invent an original plan, but simply that he should try to find out the best method, and follow it. The one which I propose to offer you I think to be the best: but opinions may differ in regard to the matter. A few years ago I had a "diagnosis class" at Bellevue Hospital, which was the most interesting with which I was ever connected, and the students found it a very rapid way of learning. Some who made the most ridiculous blunders in the early part of the course really became very skilful diagnosticians by the time it was over. Each one, you see, was obliged to make out his own diagnosis, and each one had the benefit of the mistakes which the others made. I should like to follow the same plan here, but that is manifestly impossible.

Now as to the physical examination, I will show you how every patient is examined in the private room before coming in here; but I will not make the examinations before the class. I am aware that this is very customary in Europe, but it cannot be done here, for if I should attempt it there would soon be no clinic at all, on account of the lack of patients. But even if I could do so, it would really be of no advantage whatever to you, because it would be impossible for you to see anything from the benches where you sit. I have here a patient, however shere Prof. Thomas pointed to a wooden model], who does not mind exposure, and upon whom I can demonstrate various uterine affections much better than upon the living subject.

Another point. When I see a student taking elaborate notes of a didactic lecture, I always think he loses a great deal more than he gains by it, for all the essential points touched upon by the lecturer are to be found in the books; but at a clinical lecture the case is different, and I should always advise you to take notes at these. It is very useful to note the peculiarities of different cases. No two trees are alike,

and no two cases of disease are alike. Every clinic, if the lecturer gives a faithful outline of his cases, differs in some respects from every clinic that has gone before or will come after it. I will now proceed at once to give you a practical demonstration of the method of questioning a patient.

Case I.-Multilocular Ovarian Cvst.-Catharine R-, æt. 31 years, a native of Ireland; has been married fifteen months, and has had one child, which is now five months old. She has had no miscarriage. This woman is unusually nervous, and therefore we shall not be able to elicit the rational signs of the case as well as I should like. This nervousness is not simply the result of her coming before so many strangers, but arises in great part from the nature of her trouble, which we shall presently find out. But now to our questions. Mrs. R., how long have you been sick? (To this the patient replied that she had been in perfect health until about six weeks after the birth of her child.) What do you complain of? swer.-" Pain in the left side." What else? Ans.-" Weakness and pain in the back." What else? Ans.—"A large swelling in the stomach." The most difficult thing to do is to make a patient tell her story herself, and it can only be done in this way of repeating, "What else?" and, "what else?" till you have got it all. (After further questioning, it was ascertained that the pain had commenced in the region of the left ovary, and that after the parts had been blistered by the attending physician, it went over to the right side; after which she noticed the rapidly increasing abdominal enlargement.) We have thus obtained all we want in the way of history, and our suspicions are now fixed upon certain organs. The direct examination is over, and next comes the cross-examination. If we suspected trouble about the lungs, heart, or liver, we would, of course, direct our inquiries towards the symptoms connected with these organs; but here it is either the uterus or the ovaries about which we are concerned. On questioning the patient in reference to them, we find that she has menstruated but twice since the child was born, notwithstanding the fact that she has not nursed it since it was six weeks old. Now, in a woman of her age, up to this time perfectly healthy, there is evidently something wrong about this, and it increases our suspicions in re-

She tells us, furthergard to the ovaries. more, that she has had leucorrhoea, some irritability of the bladder, and a feeling of

pressure upon the bowels.

We now proceed to make an examination in order to get at the physical signs. The patient lying on her back, with the skirts drawn up to the chest, and a sheet thrown over the lower part of the body, the hands are placed upon the abdomen; when a large tumor, weighing probably about thirty pounds, is felt. Its shape is irregular, being nodulated in outline, and it fills the whole abdomen, from the symphysis pubis to the ensiform cartilage, and from one flank to the other. (In making an examination per vaginam, I always prefer soap to any unctuous material for lubricating the fingers.) Now making strong pressure in various directions, with one hand on the abdomen, while the forefinger of the other is placed upon the cervix uteri, I find that the uterus does not move with the tumor, or at least to so small an extent as to show that they are in all probability disconnected. The same is true when the finger is placed back of the uterus. The uterine sound next being passed, shows that the cavity presents the normal measurement.

Now, after these investigations, what is our diagnosis? Well, she has an abdominal tumor. But that is her diagnosis: simply what she told us when she first came here. You must arrive at something more definite than that. What kind of a tumor is it? An enlargement of the abdomen like this might be due to a variety of causes; and we will run over some of them, in order to arrive at a diagnosis by a process of exclusion, if possible. First, although so large, it might be due to

Tympanites.—What, you say, can any physician really be deceived by this condition? There are at least six cases on record (and doubtless others have occurred) in which experienced medical men have actually cut open the abdomen with the idea of performing ovariotomy, when in reality the patient was suffering only from a "phantom tumor." It was only during the past week that I saw, in consultation with a gentleman of this city, a lady in whom the diagnosis of ovarian tumor was made by physicians at her home, a thousand miles from here, and who had come all the way to New York to have

ovariotomy performed, if necessary; yet a

careful examination proved that the abdominal enlargement was due to nothing in the world but tympanites. Percussion affords us a certain means of detecting this condition, and if you get a drum-like resonance from your percussion-stroke you may be sure that there is air present, and nothing else. In the present instance there is nothing of this kind, the percussion-note being perfectly flat, like that of the thigh. Again, the enlargement might be due to

Pregnancy.—Sometimes this occurs within six weeks after delivery. But if that were the case we should find the cervix soft and dilated, while in reality it is hard and non-patulous. Then the tumor would be comparatively soft, containing a hard mass, which would be found to move on palpation; which is not the case here. Finally, we can detect no feetal heart-sounds, and all the other physical and rational signs of pregnancy are lacking. Again, it might be due to

Ascites, or Hydroperitoneum.—The characteristic feature of this condition is that the intestines float on top of the fluid, giving a tympanitic resonance above, while the percussion note lower down is flat. We get no intestinal sound here. In some rare instances, however, the intestines are bound down to the mesentery by inflammatory adhesions, so that the fluid is found above them; and such a condition would make the diagnosis much more difficult. Again, it might be due to

Fibroid or Sarcoma of the Uterus.—In that case the tumor would be solid, and we should get no sense of fluctuation when placing one hand on one side of the abdomen and making sudden palpation on the opposite side with the other hand. Now, in the present instance we get a distinct wave on palpation, which is even very evident with the clothing on. What else might it be?

Colloid Degeneration.—Formerly this was thought to be always malignant, and was called colloid cancer; but this has been proved not to be the case. Not long since, I saw a tumor which gave a distinct wave on palpation and presented every appearance of an ovarian cyst. But on examination I found the uterus so high up that I could not reach the os with my finger, and I therefore concluded that the tumor was probably not ovarian. So, in order to make the diagnosis sure, I passed an aspirator-needle so large as to consti-

tute really a trocar, and, notwithstanding the strong suction-power of the aspirator, got no fluid at all the first time. On repeating the suction, however, I succeeded in drawing out about twenty drops, of the consistency of calves'-foot jelly. In the present case I have not as yet made any exploration to determine the character of the fluid contained in the tumor; but colloid degeneration is not common, and, I could say almost with certainty, would not be met with here. Furthermore, abdominal enlargement might be due to a

Renal or Splenic Cyst.—But a renal cyst is always high up, and always on one side, while the patient presents various symptoms connected with disease of the kidney, which is not the case here. A splenic cyst would be even higher up, and is obviously not what we have to do with.

These, then, are the negative reasons why the tumor must probably be an ovarian It is only by means of the hypodermic syringe that we can determine positively whether it is an ovarian or uterine cvst, or one of the broad ligament. As our patient resides out at Newark. I do not like to make the exploration here and then send her away in the cars. There is usually no danger attending this simple little operation, but cases have been known in which the whole contents of such a tumor have leaked away by even so small an opening as that made by the hypodermic needle, and peritonitis resulted. I have seen one such case in the Woman's Hospital: but in this ovariotomy was performed before all of the fluid had escaped. But, even without this test. I think we can pronounce with a considerable degree of certainty that it is a multilocular ovarian Its multilocular nature seems proven by the character of its surface.

Such, then, being the diagnosis, what must our treatment be? It is summed up in one word, ovariotomy. If, at the present day, you should neglect this, and attempt to cure this patient by the injection of iodine, electrolysis, or any such means, I should hold you culpable if evil should result. There have, indeed, been cases of recovery when these methods were employed; but they are much less certain and accompanied by infinitely greater danger than ovariotomy. If you should attempt to cure the case by internal medication, I should hold you still more culpable. But why not tap? Because tapping

does not cure ovarian tumor. It is true that a case has occasionally recovered under this means; but they are rare exceptions to the general rule. Our patient has consented to enter the Woman's Hospital at an early date, and I trust to be able to show her to you, at no distant period, entirely cured of her present trouble. It was the unexpected prospect of an operation which so excited her feelings at the time when she first came into the room. It will perhaps surprise you to learn how common these cases of ovarian cyst are. This is the first one that I have to show you, but it will not be the last: there will be plenty more of them here before the session is over. I have found that the vast majority of these tumors occur in women in the lower walks of life, and I think we can therefore reasonably conclude that their growth is due, as a rule, to low living and unwholesome surroundings. you have performed ovariotomy over one hundred times, as I have now done, you will be convinced of the truth of the above statement, for you will have collected very few large fees for your opera-

Case II.—Vaginismus. — Rebecca G., aged 31 years; negress. She has been married eleven years, but has never had any children or miscarriages. Yet she is a member of a race proverbially prolific, and her husband is a man in robust health. On account of the peculiar nature of her trouble, it would be repulsive to me, as well as to her, to question her publicly in regard to her complaint; and I will, therefore, tell you at once that she suffers from only one symptom, and that is dyspareunia.

These cases occur quite frequently, and, I am happy to say, their treatment is very satisfactory. I would, consequently, be willing to guarantee our patient a cure within six weeks or two months. The history of the case is a very simple one. From the time of matrimony coitus has always been impossible. Its attempt produced not only intense pain but intense hysteri-That this was not simply cal excitement. a mental condition is proved by the fact that when the finger of the physician is passed into the vagina it produces just the same result. And now I will speak more particularly of the examination which I made in the case. The first thing that I discovered was a distinct and perfect hymen. You will not infrequently hear lecturers on anatomy, in exhibiting this membrane to a class, remark, for the sake of the witticism, that the students had better examine it very carefully, for it is a great curiosity; but this is a libel against the female sex, and utterly untrue. Of the unmarried females who come to this clinic, probably as many as eight out of ten have it.

As soon as my finger touched the hymen, the patient lifted her pelvis from the table and complained of the most intense pain. The opening between the upper part of the vagina and the hymen was just sufficient to admit the tip of the finger; but, notwithstanding the pain it occasioned, I pressed my finger still farther in. Immediately, however, all the muscles contracted spasmodically upon it, and the pain became so excruciating that I was obliged to withdraw my finger without reaching the uterus. This is all that I discovered, except a small caruncle or mucous polypus attached to the urethral orifice, which, however, I think could hardly have been the cause of the trouble.

Now, what is the matter? The condition here present has been known for many years, and was first described by the old obstetrician Burns. Within the last few years Dr. Marion Sims has brought it more prominently before the profession, and given it the name of vaginismus, or vaginal spasm, which perfectly describes the character of the affection. If ether had been given, I would have had no trouble whatever in passing my finger up to the cervix uteri, because it would have relaxed the spasm of the vaginal muscles.

In these cases the hymen is usually perfect, or nearly so, and the whole difficulty arises from one of two conditions, or both: 1st, a very small entrance to the vagina; 2d, a persistently hyperæmic condition of the hymen and surrounding parts.

The affection, as I said before, is entirely curable. The treatment is as follows. First, the patient is thoroughly anæsthetized with ether, and then each *labium majus* is held back by an assistant. The parts being thus exposed, I would remove the little caruncle above spoken of by means of the scissors, and, if any hemorrhage resulted, the urethra might be tamponed; though this would probably be unnecessary. The hymen should then be seized with a pair of mouse-toothed forceps and snipped completely out with the scissors, which are preferable to the knife for

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this purpose. Some will tell you that there is great danger of hemorrhage from this procedure; but so there is great danger of hemorrhage in amputating a finger, if you do not take precautions to prevent or stop Hemorrhage can only come from carelessness on the part of the operator. To stop the bleeding the sponge is usually all that is necessary, but if a little vessel spouts, tie it, of course. Any oozing that may follow the cutting will be stopped by a contrivance which I shall presently mention. Next, it is necessary to cut down and make the entrance of the vagina somewhat larger, and while this is being done (with a bistoury) the assistants stretch the vagina on either side. The incisions are made into the perineal body, but not through any muscle, and three of them are usually necessary, one in the median line and one on either side. Lastly, one of Sims's plugs is to be pushed into the vagina. These are made of glass, and of the shape which I indicate on the blackboard. It is best to hold the plug in place by means of a broad strip of adhesive plaster passing from the lower part of the back over the perineum and up to the abdomen, and with a hole cut in it for passing a catheter. This retains it much more securely than any T bandage could do; and it is usually a very difficult undertaking to put the plug back when it has once slipped out. The plug effectually puts an end to all hemorrhage, and should be left in position for three or four days before being disturbed. At the end of that time it should be taken out, so as to permit the vagina to be thoroughly syringed with warm water, and it should then be replaced as before. In a week's time the patient will be able to remove it and put it back herself; and it ought to be worn pretty constantly for two or three weeks. By that time it need only be worn at night, and in the course of a month or six weeks she will be able to dispense with it altogether.

After a considerable experience with this operation, I may say, in conclusion, that I have yet to meet with a case accompanied with hemorrhage, and have yet to meet a case which was not cured by it.

THE death of Dr. Bazin, the eminent dermatologist, and former physician of the Hôpital Saint-Louis, is announced.

## ORIGINAL COMMUNICATIONS.

TREATMENT OF IN GROWN TOENAIL.

BY CHARLES T. HUNTER, M.D.,

Demonstrator of Surgery in the University of Pennsylvania.

(Read before the Philadelphia County Medical Society, Fanuary 8, 1879.)

N the whole range of minor surgical affections there are few that occasion more discomfort and annovance to the afflicted patient, or exercise the skill and try the patience of surgeons to a greater extent, than the disease termed in-growing of the This apparently trivial disease is a constant source of suffering to the patient, and in some cases, when it has been aggravated either from neglect on the part of the patient himself, or in consequence of causes for which he is not responsible, renders his condition wellnigh unbearable, and prepares him to submit to almost any plan of treatment that offers the slightest hope of affording relief.

The common seat of this painful affection is at the outer edge of the nail of the great toe, although in a few cases it is met with at the inner edge, and occasionally both sides of the nail are involved. The smaller toes do not always escape, for, at times, we find them affected in the same The usual exciting cause of ingrown toe-nail is the foolish fashion that many individuals, especially young people, have of wearing pointed shoes, or highheeled shoes too short for the feet. In the case of the pointed shoe the movable soft parts of the outer side of the great toe are rubbed against the edge of the nail in walking; in that of the short high-heeled shoe the foot tends to slide forward in the shoe at every step, and the edge of the nail is pressed down on the delicate integument. As a result in either case, the irritation is liable to excite ulceration of the soft tissue at the edge of the nail.

The habit that many persons have of cutting off the corners of the nail close to the quick, instead of trimming the nail square across, favors the development of ingrowing of the nail.

Injuries, contusions, and lacerations of the toe, in the vicinity of the nail, not unfrequently result in this troublesome affection.

Prolonged standing on the feet has been alleged by some observers to be a cause of

in-grown toe-nail: this, however, I can scarcely admit to be a sufficient cause, unless the foot be confined or cramped in a

badly-fitting shoe.

This disease is easily recognized. It is simply an unhealthy ulcer of the toe, involving the nail-fold and the matrix to a greater or less extent, and is kept in a state of chronic irritation by the presence of the edge of the offending nail.

As long as the edge of the nail is suffered to remain in direct contact with, or to lie imbedded in, the granulation, there will be no chance of a spontaneous cure; for the nail in this diseased condition of the part acts like a foreign body, and thus serves to keep up inflammatory action.

In the treatment of this painful affection of the toe, very little advance has been made since the days of Celsus. This distinguished author recommended excision of the nail and the subsequent application of caustics to the nail-bed, a method most commonly practised by surgeons ever since. Yet surgeons have been very industrious in their attempts to devise less serious means for the radical and permanent cure of in-

growing of the nail.

Gosselin states, in one of his lectures on surgery, that he has counted as many as seventy-five plans of treatment suggested by surgeons from time to time, thus clearly proving that no one treatment has been uniformly satisfactory in its results. The great desideratum in the treatment of this disease is, in my opinion, the restoration of the diseased part to a healthy state without sacrificing the nail, the natural covering and protection of the extremity of the toe. Therefore, any treatment that will accomplish this in all cases ought certainly to be preferred, even if a successful result necessitate longer time and more personal attention on the part of the surgeon than are commonly required when destruction of both nail and matrix is resorted to as a radical cure.

As I have already intimated, the theory of the treatment employed at the present time for radical cure of in-grown toe-nail implies permanent loss of the nail. According to the advocates of this theory, it is not sufficient alone to remove the nail. The matrix likewise must be destroyed, so that the nail can never be reproduced. To secure this result,—i.e., eradication of both nail and matrix,—two methods are advised, by one of which the

nail is forcibly torn out, and the matrix destroyed by a potential caustic, by the other the last phalanx, together with the superincumbent nail and matrix, is removed. By either of these heroic plans it is evident that the in-grown nail will be most effectually removed, but not without serious risk and much subsequent pain and Avulsion great discomfort to the patient. of the nail and cauterization of the matrix is an exceedingly painful operation, and one that very few persons have the fortitude to submit to without the aid either of a general or of a local anæsthetic. In applying the caustic to the uncovered matrix, great care must be observed lest the destructive action of the caustic, particularly if caustic potassa be used, extend to the subjacent periosteum and bone. this unfortunate circumstance occurs, of course there are prolonged suppuration and more or less necrosis of the bone, complications that render the poor patient's condition, for a time at least, really worse than it was before the operation, and necessarily retard the cure for an indefinite period.

Then, on the other hand, if cauterization of the nail-bed be not sufficiently thorough to destroy it completely, a deformed nail, or a thick corneous substance, poorly adapted to protect the extremity of the toe, is liable to be formed. That these unpleasant consequences do sometimes follow the method just described is well known to every surgeon who has had much experience in the treatment of in-

growing of the toe-nail.

I am free to acknowledge that in my own practice I have had at least two cases in which there was exfoliation of a portion of the last phalanx in consequence of the destructive effect of the caustic potassa extending beyond the limits of the matrix.

Removal of the distal phalanx with the nail and matrix en masse from the dorsal aspect of the toe I have seen resorted to only by one surgeon, although I presume other surgeons have had recourse to the same method as a means of curing ingrown toe-nail. The advantage claimed for this heroic plan is, that the plantar flap of dense fibrous tissue, when union has taken place between the edges of the wound, forms the extremity of the toe, and thus affords a surface peculiarly fitted to sustain pressure.

It is scarcely necessary to observe that

an operation of this gravity is not unattended with risks of a serious nature. Owing to the character and the extent of the part involved in this operation, the patient would be exposed to a variety of dangerous complications, such as ervsipelas, burrowing abscesses, angeioleucitis, pyæmia, tetanus, etc., some of which are commonly fatal. Yet, should some of these complications supervene in the progress of a case treated by this method, the patient's recovery from what might almost properly be called an amputation of the toe would be comparatively slow under the most favorable circumstances.

Instead of extirpation of the entire nail and matrix, many surgeons are content with removal of only that part of the nail which is instrumental in keeping up the trouble from which the patient is suffering. If the case be of an aggravated character, i.e., one in which the edge of the nail is incurved and deeply imbedded in a mass of exuberant granulations, these surgeons destroy the limited surface of matrix exposed by avulsion of a narrow section of the nail, and the granulations with caustic. The ultimate effect of this proceeding is to leave the toe only partially covered with a nail having a sharp margin that is always ready on the slightest provocation to excite ulceration of the contiguous soft parts. Of course, in the cases in which only a section of the nail is torn out and the matrix not destroyed, the nail will soon be reproduced; and, if great care be not taken by the surgeon, or the patient himself, to prevent it, the new nail as it grows out will take the abnormal direction of the old, and, as a consequence, will tend to keep up or renew the disease for the relief of which the operation was performed.

Several less severe methods than either of the above are described in surgical textbooks. The object of these various milder methods is the cure of this very troublesome disease without loss of nail and matrix,—an exceedingly desirable result, and one well worth striving to attain.

The treatment in greatest favor with those who believe that extraction of the whole or a part of the offending nail is not necessary in order to effect a cure, consists in the separation of the nail from the ulcer by interposing some foreign body between them. Gosselin\* gives credit to

an Italian surgeon of the sixteenth century. by the name of Fabrizio d'Acquapendente. for having first originated this rational treatment. To keep the edge of the nail from the exquisitely sensitive ulcer. Fabrizio used lint. Desault recommended a strip of tin. Boyer preferred a thin piece of lead. Cork has also been suggested. According to Gosselin, when lint is used it is to be pressed under the edge of the nail with a small spatula or the flat end of a probe. A small pledget of lint is also to be placed between the outer edge of the nail and the nail-fold, by which means the ulcerated soft parts are kept separated from the nail. To complete this dressing, and to keep the lint in place, a narrow strip of adhesive plaster is to be wrapped around the toe two or three times. This dressing is to be renewed every other day.

To this method, as described by Gosselin in the work quoted above, many objections have been alleged by surgeons who prefer the so-called radical treatment, among which are the length of time necessary to perfect a cure, six or eight weeks being the time said to be required: the pain attending frequent renewals of the dressings; the necessity of confining the patient to his bed or to his room during the progress of the treatment; and, finally, the great liability to a recurrence of the disease after a cure has been effected. has been my experience that the radical methods, viz., extraction of the whole or a part of the nail with or without the matrix being destroyed, or excision of the last phalanx with the overlying nail, are by no means free from some of these objections, nor from many others of a graver character, that have already been enumerated. In my service in the out-patients' department of the Pennsylvania Hospital and of the Hospital of the University of Pennsylvania I have treated a good many cases of ingrowing of the toe-nail, of all degrees of severity, during the past five or six years. I have had, therefore, a fair chance of testing different methods of treatment and of comparing their respective results.

The method that has furnished the most satisfactory results in my hands is one that Dr. John Neill, late Professor of Clinical Surgery in the University of Pennsylvania, practised with the most gratifying success while he conducted the surgical clinic in the above institution. The principle of Dr. Neill's method is identical with that of Fa

<sup>\*</sup> Gosselin's Surgical Lectures, p. 6.

brizio's: yet the former method differs from the latter in many very important details, to which fact, in my opinion, Dr. Neill's suc-

cess may be properly attributed.

The first step in Prof. Neill's method consists in cutting or scraping a longitudinal groove in the nail, extending from its root to the free end, in order that its edge may be more easily raised from the ulcer. Then, after the surface of the ulcer has been thoroughly cleansed and dried, collodion is to be painted over the surface of the granulations with a camel's-hair pencil. As soon as the granulations are covered with a film, consequent upon evaporation of the ether contained in the collodion, cotton in small quantities is to be gently pressed well under the edge of the nail, with an instrument that will be described farther on. When sufficient cotton has been introduced beneath the nail to keep its edge separated from the soft parts, a small roll of the same substance is to be placed between the outer margin of the nail and the contiguous nail-fold, after which glycerized collodion or simple collodion is to be brushed freely over the diseased parts and the dressing.

To complete the dressing, a narrow strip, about a centimetre in width, of ordinary adhesive plaster is to be wrapped around the toe two or three times. In applying the strip of plaster, care should be taken to carry it from the nail to the swollen nailfold, and thence around the toe, by which means, together with the small roll of cotton placed as above described, the nail-fold will be pressed off from the offending nail. This entire dressing need not be changed oftener than once a week, or three times in two weeks, in the majority of cases.

In a few cases of an aggravated character, in which the sharp edge of the nail is deeply buried in the soft tissue, and exuberant granulations cover a portion of the nail, for the first few days of the treatment, as a preliminary measure, nothing except simple collodion is to be applied to the diseased part. In these exceptional cases the effect of the collodion on the mass of granulations, in consequence of its contractile property, will be to press the granulations away from the nail, and thereby to facilitate interposition of cotton between the margin of the nail and the ulcerated soft parts. When a patient has cut his nail short, especially at the outer corner, under the false impression that by this means he may obtain relief, some difficulty will be experienced in pressing cotton under the margin of the nail. It is, therefore, of the utmost importance in the treatment of such a case that the free end of the nail be suffered to grow out square, for then cotton can be more easily pressed beneath the nail, and effect greater separation of the affected parts, thus hastening the cure.

The time required to accomplish a cure by this method will depend on the nature of each individual case, and the thoroughness with which the details of the treatment are carried out by the surgeon. In mild cases of short duration, in which the outer corner of the nail has not been cut off short, one or two renewals of the dressing is all that is usually required. The worst cases are generally entirely cured in a period varying from four to six weeks, rarely longer, and during this time it is not necessary to keep the patient in bed, or even confined to his room. Indeed, I always advise these patients not to give up their work while they are under treatment,—a matter of great moment to those who are dependent on their daily earnings for support.

As a result of my experience in the treatment of cases of in-growing toe-nail that were subjected to the operation of avulsion of the whole or a part of the offending nail, together with the cauterization of the matrix and the granulations, I am satisfied that this heroic method requires much more time in which to effect a cure than the method so successfully practised by Prof. Neill. Even when a cure has been obtained by the method of avulsion of the nail, the patient is unable for some time afterwards to wear a boot or shoe that is liable to press on the toe, in consequence of the sensitiveness of the recently cicatrized surface.

Another marked advantage possessed by the method practised by Prof. Neill, over all the methods that involve loss of the nail, is the fact that renewals of the dressing to the diseased toe, after the first application, are comparatively free from pain. In order that this may be the case in all instances, it is essential that the application of the primary dressing be most thorough, especially that cotton be pressed well under the margin of the nail, so that the inflamed and ulcerated tissue shall be freed from a continuous source of irritation. I admit that considerable pain may

be provoked by the first attempts to insert cotton under the nail, although the exquisite sensitiveness of the parts is always lessened to some extent by the collodion that is previously painted over them. In the most aggravated cases, however, I have never yet found it necessary at the first dressing to administer an anæsthetic to the patient. On the other hand, every one knows that there are few surgical operations that are so painful as the forcible pulling out of an in-growing toenail and the cauterization of a highly-inflamed nail-bed. The bare thought of this operation is sufficient to excite a shudder. and quickly reconciles a timid patient to submit to anæsthetization in order that no pain shall be felt. Indeed, the suffering consequent upon the action of the caustic will continue for some time after the effects of the anæsthetic have passed off, unless some agents have been previously applied to the cauterized surface and have modified or neutralized the specific action of the caustic.

As an objection to the former method, it is alleged that the application of the dressing, which should always be the work of the surgeon himself, is troublesome, and occupies more time than the nature of the affection apparently deserves. It is true that every renewal of the dressing must be made by the surgeon himself, for the success of this special treatment depends principally on the thoroughness with which it is carried out in all of its details. Hence the method apparently involves more attention on the part of the surgeon than the method of extraction.

A complete and permanent cure without loss of the nail is the best result that can possibly be obtained, and consequently is sure to command the patient's gratitude to his surgeon for the skill with which he has treated his case. A knowledge of this fact ought to be a source of the highest gratification to the surgeon, and in a measure compensate him for the extra labor to which this peculiar treatment may have subjected him.

It now remains briefly to describe the instrument that Prof. Neill was accustomed to use with such universal success in the treatment of in-grown toe-nail. It is simply a round piece of polished steel, about ten centimetres (nearly four inches) in length, and a little less than two millimetres in diameter, with one end flattened.

Prof. Neill, when describing this little instrument to his class, used to tell them that it might be easily made from an ordinary knitting-needle. According to him, it was simply necessary to take a No. 16 knitting-needle to a blacksmith's shop, have it cut in two, and make one end of one of the pieces flat and sufficiently thin by hammering it out on an anvil. The sharp angles are to be rounded off. Of course a knowledge of this fact is of some importance to a physician who is not within easy reach of a surgical-instrument maker.

The flat end of a silver probe, which is sometimes used, will not take the place of a toe-nail probe made in the manner just described in the treatment of in-growing toe-nail.

The explanation of this is that the flat end of a silver probe is so thick that one finds it almost impossible to press cotton well under the side of the offending nail with it: therefore all attempts to substitute the silver probe for the toe-nail probe have ended in failure, and consequently have brought undeserved discredit on this method of treatment.

In treating cases of in-growing toe-nail, I found that cotton could be easily inserted beneath the free end of the nail with the ordinary toe-nail probe, but that some difficulty was experienced when I attempted to interpose cotton between the lateral margin of the nail and the exuberant granulations overlying it. It soon became evident that this difficulty lay in the fact that a straight probe was not of a proper shape to carry pledgets of cotton down between the convex side of the nail and the exuberant or fungoid mass of granulations closely applied to it. As a consequence, therefore, with the introduction of the first small roll of cotton well beneath the incurved edge of the nail, the ulcerated and exquisitely sensitive nailfold was always pressed down and more or less bruised, thus rendering the operation unnecessarily painful, and one that very few patients were willing to have repeated a second time. It occurred to me that cotton might be interposed between the edge or lateral margin of the nail and the nail-fold with less discomfort to the patient if the flat end of the probe were a little curved. Accordingly, I had the other extremity of the toe-nail probe flattened and slightly curved on the flat,

the curve corresponding with the convexity of the lateral margin of the nail.

The accompanying cut is a fair representation of the intrument. Now with the straight end of this little instrument cotton can be readily pressed under the free end of the nail; with the curved end the same material. with equal facility, can be interposed between the incurved edge of the nail and the nail-fold. To introduce cotton beneath the lateral edge of the nail with the probe thus modified, a small roll of it is to be placed in the groove between the nail and mass of granulations, collodion having previously been painted over the parts; then, with the probe held perpendicularly to the nail, with the concavity of its curved extremity looking towards the convexity of the side of the nail. the small roll of cotton is to be gently but firmly pressed down well under the lateral edge of the nail. The end of the probe should be gently pressed against the dense surface of the nail as it carries the cotton down between the nail and the contiguous soft parts, in order that the delicate granulations may not be injured. Successive small pledgets of cotton are to be introduced in this manner till the offending edge of the nail and the diseased soft parts are sufficiently separated from each other. The remaining details of the treatment are to be carried out as already indicated.

In passing, it may be of interest to observe that no advantage is to be gained by stuffing a large mass of cotton between the nail and the nail-fold at the first dressing. When this is carelessly done, the dense mass of cotton is almost sure to act as an irritant, and, as a consequence, set up violent inflammation of the parts surrounding the nail, unless the cotton has been promptly removed before it has had time to do harm.

The uniform success that has attended this method of treating in-grown nails, not only in my practice but also in the practice of others who have carefully carried it out in all of its details, has induced me to recommend it as an almost certain means of curing this painful affection without loss of the nail. It is but fair to say, however, that some authorities deem the preservation of the nail of very little importance.

Mr. Jonathan Hutchinson, in a recent paper.\* says. "The nails are of comparatively little use to us; for, however great might be the loss in beauty to the fingers, the substitution of a firm pad of tactile skin in the place of the nails would probably be a decided gain to a considerable proportion of our highly civilized communities." This assertion of Mr. Hutchinson's may be partially true, so far as the finger-nails are concerned, but I do not think it holds good when applied to the nails of the toes. It has always seemed to me that the nails formed a firm and resisting covering for the ends of the toes, and shielded them from the unpleasant effects of the intermittent pressure of the boot or shoe. It is certain that, if the extremities of the toes were not provided with nails, some other method than the present one would have to be devised for protecting the feet. wearing of boots or shoes made of leather or other similar material would soon result in the development of corns on the unprotected surface of the toes, a condition that would make locomotion on foot exceedingly painful.

Whatever may be the functions of nails, to my mind it is perfectly clear that they ought not to be heedlessly sacrificed whenever it is possible to preserve them. The preservation of any part or organ of the body in a state of health, or its restoration to its normal condition when diseased, without impairment of structure or loss of function, is, in my opinion, the highest de-

velopment of the art of surgery.

ALKALIES AND THEIR SALTS PRO-MOTING SOLUTION OF VEGETA-BLE MATTER.

BY E. T. BLACKWELL, M.D.

THE demand for elegant and palatable medicines has greatly stimulated pharmaceutical skill, and resulted in an extended list of preparations either involved by tasteless materials or otherwise rendered acceptable to the sense of taste.

To shape the cheaper and coarser drugs into a more efficient form, while diminishing the time employed for their preparation, shall be the effort of this paper. The suggestions to this end in works of pharmacy are susceptible of great expan-

<sup>\*</sup> Medical Times and Gazette, April 20, 1878, p. 423.

sion. The use of alkalies in the solution of resinous matters is well known, and their aid has been accepted in a few pharmacal compounds. In reducing the gum resins to the form of mixture this aid has been invoked in a single instance,\* while its capabilities admit of a much wider application. The list of articles that may be so used is quite large,—the liquor potassæ, liq. sodæ chlorinatæ, many oxy-salts of potassa and soda, together with their iodides, chlorides, and bromides.

Of these, the liquor potassæ is among the most efficient; but, in making a selection, reference should be had to the therapeutical quality desirable in the adjuvant. In some instances the chlorinated solution of soda fulfils this object well. Rubbed with ammoniac, it develops a deep-red color, which quickly disappears. The borate of sodium also greatly facilitates the breaking-up of the agglutinating forces inherent in this class of drugs. The following prescriptions, which embody the principles herein set forth, have been practically tested, yielding satisfactory results:

R Myrrhæ, 3ss; Potassæ iodidi, 3j; Aq., Oss.

Triturate the first two ingredients, moistened by a very small amount of the menstruum, the balance being gradually added as the mass softens.

S.—C. p. quæque hor. ter.

R Myrrhæ, 3j; Sodæ boratis, 3j; Aq., Oss.

R Myrrhæ, 3ss; Ammoniæ hydro-chlor., 3ij; Aq., Oss.

R Myrrhæ, 3j; Liq. sodæ chlorinat., 3ss; Aq., 3vii.

R Myrrhæ, 3j; Potass. bromid., 3ij; Aq., Oss.

All the above are prepared as in the first example, and one or two teaspoonfuls form a dose.

The changes may be rung in like manner on ammoniac, with a similar result, viz., quickness of preparation and a permanent form, there being no sediment that cannot easily be taken up by shaking the

Cold infusions of vegetable matter may be made with much facility by a short previous digestion in an alkaline solution. Labarraque's solution seizes immediately upon their texture, as is shown by its quick effect upon the color, the taste also attesting to the absorption of the bitter principle. Its stimulant, antiseptic, and antacid qualities greatly enhance its medicinal powers, while it is much less liable to fermentation than when prepared in the usual way.

R Gentianæ contus., 3ss; Liq. sodæ chlorinatæ, f3vi; Aq., 3vij.

Mix the gentian with the chlorinated solution, allowing it to digest one hour; then throw upon a percolator, adding the water as required.

S.—Take a tablespoonful before meals. Liq. ammoniæ is a powerful solvent not only of resinous but of non-resinous vegetable matter. Of this I have availed myself in dissolving aconite for external use, producing very quickly a most concentrated anodyne and powerfully-stimulating embrocation;

R Rad. aconiti contus., 3j; Liq. ammoniæ fff., Oj.

To the root add enough of the menstruum to cover and thoroughly moisten it. Digest for a few hours; place it in a percolator, following with the balance of the alkaline liquid and sufficient water to make a pint. It may be used alone, or with some stimulating oil, that of sassafras being one of the best.

A CASE OF PUERPERAL ECLAMP-SIA SUCCESSFULLY TREATED BY CHLORAL HYDRATE.

BY M. W. WARFIELD, M.D.

MRS. E., a primipara, æt. 35 years, is a tall, stout woman, of brunette complexion; married thirteen years. She has suffered from nausea and vomiting during the whole period of gestation. Four weeks since, I analyzed the urine, suspecting albuminuria, but obtained only negative results. I had made no examination since that time, nor had I seen her since, until her labor, January 7, when I found the patient still vomiting, and complaining of headache, although she had bled profusely from the nose. Face

mixture. The addition of any glutinous material before or during trituration hinders the operation.

<sup>\*</sup> Mist. Ferri Comp., U.S.

swollen and purple: evelids puffy, hands

The os was dilated to the size of a halfdollar; rigid. Head presenting in first position. The pains were regular.

The case progressed without accident. Bowels were moved by an active cathartic. Kidneys seemed sufficiently active until the bearing-down pains came on. At two o'clock P.M. Mrs. E. was suddenly seized with a violent convulsion. With such delay only as was caused by a lancet rusty from long disuse, I relieved the patient of a quart of blood (without arresting the convulsions), and sent to my office, three-quarters of a mile distant, for chloral hydrate and chloroform. the messenger returned, as the patient was unable to swallow, I administered, per rectum, forty-five grains of chloral hydrate, using chloroform (of which I had but little) on a handkerchief until she came fully under the influence of the chloral. The spasms were I repeated the chloral injections as often as the effect seemed to wear off, until the close of the labor, which occurred about four o'clock P.M., when Mrs. E. was delivered of a female child weighing nearly ten pounds. I left my patient about seven P.M. restored to consciousness and able to converse, but was startled by a messenger two hours later who reported Mrs. E. to be dying. I hastened to the house, and found my patient quite delirious and very restless, requiring some one to hold her in the bed. She had had a strong convulsion before my arrival. Again administered the chloral hydrate, this time ninety grains to the dose, with the same result as before. Stayed by the patient all night, and renewed the chloral as required, adding laudanum when my chloral was getting exhausted. Just before day, I was aroused from a doze, to hear her talking rationally and inquiring what had happened, etc.

As soon as Mrs. E. could swallow, I put her upon the following prescription, although I was not sure that her condition was due to

uræmia:

Bitartrate potass., 3iss; Fl. ext. digitalis, 3ss; Syrup. squill, 3ss; Swt. spts. nitre, Zii; Water to make Zviii.

Dose, two tablespoonfuls every two hours.

To relieve the headache and guard against any return of the spasms, I ordered between these doses twenty grains bromide potass., all of which has acted favorably, and my patient is now convalescing rapidly.

My object in reporting this case is to impress on the profession the value of chloral in the treatment of eclampsia. In the course of my practice I have had a number of such cases, in only one of which (occurring about the fourth month of pregnancy) was I able to arrest the convulsions until delivery had been accomplished, although chloroform, bleeding, etc., had been tried. I attribute my success in the above case entirely to the free use of chloral hydrate. LISBON, HOWARD CO., Mp.

#### FIBROID TUMOR OF THE EAR. BY ROBERT P. FINLEY.

ATTIE M., colored, aged 12 years, had two tumors, one situated on the lobe of each ear, standing out at right angles from the posterior surface. The tumor on the right lobe measured five-eighths of an inch at the base in diameter, about three-fourths of an



inch at the free end, and half an inch in length. The tumor on the left ear measured half an inch at the base, five-eighths of an inch at the free end, and three-eighths of an inch in the middle, the length being one and onequarter inches. The ears had been pierced about three vears previous, when she was nine years old, with a common steel

The tumors made their apsewing-needle. pearance one year after the ears were pierced. One peculiarity of the growth was the fact that the puncture made in piercing the ears extended through the entire length of the tumors. On August 2, 1878, Dr. H. M. Perry operated, removing each tumor en masse, the wound healing readily. The accompanying sketch shows the shape and situation of the tumor on the left ear, the one on the right ear being similar.

#### WINTER COUGH RAPIDLY CURED BY ATOMIZED CHLORAL DRATE.

BY ROBERT FLETCHER, M.R.C.S. Eng.

'HE form of chronic bronchitis in elderly persons, known as "winter cough," is a source of so much discomfort to the sufferers and to those around them, and is so frequently the precursor of serious complications, that an additional remedy of apparent promise is worthy of being made known.

A lady of about 50 years of age, who has been troubled with a chronic cough for three or four winters past, upon returning from the sea-side in September was attacked with subacute bronchitis complicated with gastric disorder. This soon yielded to treatment, but left a rasping cough, which destroyed her rest at night

and seemed likely to continue throughout the approaching winter. After administering various remedies, in atomized form and otherwise, during several weeks, without much benefit, it occurred to me to try a spray of chloral hydrate. A solution of ten grains in an ounce of water was inhaled through a steam atomizer each morning and evening. Improvement was soon observed, and after two weeks' use of the remedy the cough *entirely* disappeared, and has not returned. The inhalation was continued, at increasing intervals, for a few days longer as a measure of precaution.

In a second case its employment was attended with a like successful result.

I do not remember to have seen chloral hydrate in the atomized form recommended in chronic bronchitis, and therefore suggest it as meriting further trial.

WASHINGTON, D.C.

#### TRANSLATIONS.

TREATMENT OF EPILEPSY BY MEANS OF CURARA. - Kunze (Wiener Med. Presse, 1878, No. 42) speaks of the unsatisfactory effects of those drugs usually recommended for epilepsy, as atropia, strychnia, bromide of potassium, or ammonium. The last two, he says, act, in his experience, for about six months, after which the attacks return with renewed violence and sometimes even double. This being the case, he thought of trying the effect of curara, experimenting with the view of ascertaining what limits could be set to the dosage of this powerful and dreaded agent. To his astonishment, he ascertained that doses of .03 centig. (1/2 gr.) could be administered hypodermically without danger, and that the first symptoms of poisoning—dimness of vision, with uncertainty of outline in near objects, together with some benumbing of the sensorium—only came on with larger doses. Kunze's observations extended to eighty cases, of which six were permanently cured; but he regards this number as too small to draw very decided inferences. The mode of treatment was as follows. hypodermic injections were given every five days for three weeks, then were suspended, and the advent of the next attack awaited. The space of time intervening between the last hypodermic injection and the next attack gave the indication as to the further administration of the remedy. Binz adds

that otherwise fatal spasm can be cured by curara. A case of hydrophobia was thus cured at Münster. Binz has also tried experiments upon dogs poisoned with brucine. In five cases the dogs were saved by curara. while the "control" animals all died; in three cases the dose was too small. urges further trial of curara, without regard to the symptoms of suffocation which it may at times produce, which indeed in the case of the invariably fatal hydrophobia does not weigh for much, in connection with the use of artificial respiration. Birch-Hirschfeld alludes to the great variety in the preparations, and advises previous experiments with animals.

AMENORRHŒA DUE TO PREMATURE ATRO-PHY OF THE UTERUS AND TO PULMONARY TUBERCULOSIS. - Among the causes of amenorrhœa enumerated by Dr. Jacques Popper in his "Clinical Contributions to the Knowledge of Amenorrhœa," just published in the Wien. Med. Presse (see Nos. 39, 40, and 42, 1878), is atrophy of the uterus of the premature variety. He has seen twelve cases of this affection during the past year, and gives brief notes of each. Most of the cases were of married women who had ceased suddenly to menstruate after the birth of a child. In the case of the unmarried women anæmic symptoms were usually present. Examination by the sound showed different degrees of atrophy in the various cases, in some the uterus being almost too small to be perceived by the usual manipulations. With regard to amenorrhœa from tuberculosis of the lungs. this does not so frequently come to the notice of the gynæcologist, as patients are usually more interested in the lung trouble than in the uterine. The age of these patients was, in one case, 19; in two cases, 23; in two, 27; in four, 28; in one, 37. In two (one 19, the other 28) the menses had never appeared; in the others it had always been irregular, and had ceased with the earliest appearance of the chest trou-

TUBERCULOUS ULCERATION OF THE MUCOUS MEMBRANE OF THE HARD PALATE.—Quenu (La France Méd., 1878, No. 85) had a case of pulmonary tuberculosis in a young man without syphilitic history, who complained of aphonia one day, and of picking in the larynx, with pain about the hyoid bone, on swallowing. A few days later the patient complained of smarting pain in the palate, and that liquid food

returned by the nose. On examination, an ulcer of the hard palate was discovered, which the patient said had originated in a little "wen" a week previously. This ulcer was on the median line, three or four millimetres from the incisors; it was elongated antero-posteriorly, and extended back to a line with the posterior molars. It was sharply punched out, sinuous in its outline, as if composed of various small ulcers which had united. The surface of the ulcer was covered with grayish-yellow débris: it was deeper in front, where it perforated the hard palate in an opening six millimetres by four millimetres. The mucous membrane of the posterior part of the palate was tumefied and covered with half a dozen small granulations. Farther forward, one centimetre from the line of the teeth, to the left of the ulcer, was a patch covered with caseous matter. Microscopic examination at the autopsy showed the corium of the mucous membrane presenting signs of intense inflammation; along the elastic fibrillæ were concatenations of embryonic cells, which at two points constituted small nodes of a roundish form; in the centre of one of these was an elongated deeply-colored granular mass; the elements forming the rest of the node were heaped up against one another, granular, indistinct except at the periphery, where the fibrillæ of connective tissue interposed between the cells. Around these nodes the cellular infiltration was much more marked; few vessels could be seen; the cellular elements diminished as the glandular layer was approached. The glands appeared healthy. In the immediate neighborhood of the ulceration the infiltration of the mucous membrane was such that stroma could hardly be perceived,—only a mass of embryonic elements, without any trace of vessels. In the velum palati the changes were even more marked, some glands being involved. The amygdalæ were also found infiltrated with cells, etc. The seat of this ulceration is rare. mann, in his thesis, states that forty cases of tuberculous ulceration of the tongue are on record, and five or six of ulcer of the lip. Ulcers of the pharynx and isthmus faucii are more frequent. Spillmann gives no case of ulcer of the palate. It should be said that the perforation of the palate was through the bony canals, the contents of which were destroyed. The bone, though denuded of periosteum, was intact. x.

Cysticerci in the Brain and Eve-DIAGNOSIS DURING LIFE. - Dr. Joseph Pollak (Wien. Med. Presse, 1878, p. 1480) was called to see a scrofulous boy of 8, who was meagre, but without any symptoms of disease in the thoracic or abdominal organs. He complained of severe pain in the head; often screamed out; occasionally passed urine and fæces involuntarily: vomited at once all food taken. diagnosis was made of brain irritation: iced applications and leeches were ordered. At the next visit Dr. P. learned that the patient complained less, retained food upon his stomach, and felt much better. At a later visit (date not given) the patient was found lying apathetic, feverish, face and chest covered with perspiration; pupils enlarged; urine and stools passed involuntarily; abdomen tense. The child screamed and cried out on account of severe pain in the head. He had also had epileptic attacks. Two days later, Pollak. to his astonishment, found his patient sitting up in bed, appetite good, no vomiting, and no pain. Two days later again, symptoms of hydrocephalus showed themselves, and the patient fell into coma and died on the next day. The day before death it appeared that this dubious case, which first showed marked symptoms of hydrocephalus and then for days at a time displayed complete apyrexia, must either be a case of neoplasm or entozoa. The latter seemed the most plausible hypothesis, because the child showed continuous dilatation of the pupils and had had "worms." The evening before his death, Pollak examined the eyes of the comatose patient, and perceived, to his surprise, that the pupil first became dark and then light, evidently by some yellowish-white body, not more than a line in length, moving about in the ground of the eye. Closer examination left no doubt as to the diagnosis, although a post-mortem examination was not per-

LOTION IN PITYRIASIS OF THE FACE. R Liq. plumbi subacetatis, f3ss; Vitelli ovorum duorum;

Aquæ sambuci (Ph. Lond.), Oj.—M.

CHLORAL IN CHOLERA.—In the India Medical Gazette of December 2 are reported three cases of cholera treated by the hypodermic injection of chloral, and all fatal, although, we are told, the effect was very good in allaying spasms and procuring sleep.

# PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, FEBRUARY 1, 1879.

#### EDITORIAL.

#### PUBLIC HEALTH.

A LTHOUGH in our last issue we discussed the subject of national health legislation at some length, it seems necessary to recur to the matter. We desire also to reiterate, what we before distinctly intimated, that any seeming opposition to Dr. Woodworth is solely in respect to the present subject, and is not in any way based upon distrust of his ability to fulfil the duties of the office he now holds, or of his honesty in so doing.

Since we wrote, two bills have been presented to Congress and referred to committee. That of Mr. Withers differs from, but in its spirit accords with, the recommendation of the American Public Health Association. It refers the matter to the National Academy, directing this body not to appoint a commission, but to collect evidence upon questions of quarantine, etc., to prepare a plan for a national public health organization, "after consultation with the principal sanitary organizations and sanitarians of the several States and of the United States," and to report to the next Congress. This bill, we think, is even preferable to such a one as is indicated in the "memorial" of the Public Health Association. It certainly is not an attempt to raise a crop without preparing the ground.

The third bill before the committee is that of Mr. Matthews. It is much less objectionable than that of Mr. Lamar, which we noticed in our last issue, in that it makes the "Director-General of Health" the executive officer of a "Board of Health" of which he, the Surgeon-General of the Army, and the Surgeon-

General of the Navv are ex-officio members. The bill is a long and minute one. composed of seven sections and occupying nine printed pages. To discuss all its details would require more space than we can spare, and more detailed knowledge of quarantine and similar matters than we have at our disposal. The objection to it is that it is premature, it being impossible for a Congressional committee to see, this winter, every side of the question. Only after a prolonged, detailed, and thorough examination, such as the National Academy of Sciences is succinctly directed to make by the bill of Mr. Withers, can Congress with safety permanently legislate upon this most important and delicate subject.

#### LEADING ARTICLES.

## SUBSTITUTES FOR CARBOLIC AND SALICYLIC ACID.

THYMOL-BENZOIC ACID.

In accordance with the promise made in our last issue, we to-day discuss thymol and benzoic acid.

Thymol is found in the oil of thyme and of some other plants. It occurs either as an uncrystallizable liquid or in white rhombic or acicular crystals. It has been used with satisfaction as a substitute for carbolic acid by Volkmann and Ranke, of Halle, and other practitioners, but, although it is undoubtedly powerfully antiseptic, does not seem to have rapidly gained favor. Its fragrant odor has proved a decided disadvantage, in summer at least, by attracting swarms of flies. It is not free from poisonous properties. On the other hand, it is claimed that it does not irritate the skin, and has a decided influence in preventing discharges. Spencer Wells employs its watery solution (1 to 1000 of warm water); Volkmann, thymol I part, glycerin 20 parts, alcohol 10 parts, water 1000 parts. It has been used internally by Bälz (Lond. Med. Record, 1878) in doses of thirty grains a day, or less. In a few instances nausea and vomiting were caused. There was abundant sweating, singing in the ears, deafness, constriction in the forehead, reduction of temperature, and frequently diarrhœa. The urine was dark-greenish,

vellowish brown by transmitted light, free from albumen, becoming cloudy and grayish white on the addition of the tincture of the chloride of iron. Violent delirium occurred several times, also marked collapse, and, in one case of typhoid fever, unconsciousness, with most alarming collapse. Dr. Bälz concludes that the remedy is much less certain and more dangerous as an antipyretic than is salicylic acid. The possession of poisonous properties by thymol has been confirmed by the recent experiments of Dr. B. Kuessner (Med. Times and Gaz., December, 1878, p. 716). This observer found that when given to dogs and rabbits by the stomach the poison acts very slowly and feebly, on account of its slow absorption, but that when injected into the circulation it produces death by failure of respiration. Coma is developed some time before death, and the blood-pressure, which at first maintains itself, now falls steadily. Post-mortem examination failed to detect fatty degeneration or other lesion in either the solid tissues or the blood. The continuous repeated exhibition of small doses of thymol had no perceptible effect, except to interfere in some way with nutrition, so that the animals lost flesh.

The evidence already forthcoming indicates that the therapeutic use of thymol will be very limited. Its costliness and the absence of marked advantages in its favor militate against its being largely

used externally.

There is, however, one local employment of it which is important,—namely, as a detergent antiseptic in various ulcerated and diseased conditions of the mouth. For such use its agreeable taste and odor preeminently fit it. That anything whatever is to be gained by its internal use is not at all certain. Enough has been said to condemn it as antipyretic. Kuessner found the sugar in the urine of a patient with diabetes reduced by from one to two grammes of thymol per diem; but Fürbringer (Deutsches Archiv für Klin. Med., xxi.) reports a case in which one gramme daily increased the sugar. Kuessner thinks thymol (three to five mimims of a one per cent. solution three times a day) of value in vesical catarrh and in infantile diarrhea, and that inhalations (one part to 1000) diminish the fever and expectoration of phthisical patients.

Benzoic acid, as is well known, is found

abundantly in the so-called gum benzoin. which almost from time immemorial has enjoyed a reputation among the vulgar as a vulnerary, and formed the basis of a host of such remedies as "Friar's Balsam," "Iesuits' Balsam," "Baume de Commandeur." Our modern compound tincture was in the older Pharmacopæias a "balsamum traumaticum." The revival of the external use of the remedy seems, therefore, an instance of the not infrequent modern discovery of a scientific basis for some old. half-exploded, beridiculed popular belief. That benzoic acid is very inimical to the lower forms of animal life is demonstrated by the experiments of Dougall (Med. Times and Gaz., i., 1872), E. Solkowski (Berl. Klin. Woch., 1875, 297), Grube (Centralb. f. Chir., 1876, 718), Bucholz (Arch. Exper. Path. und Pharm., Bd. iv.), and Fleck (Benzoësäure, Munich, 1875). All these observers agree in giving a first rank to the drug as an infusoricide and preventer of putrefaction, most of them asserting its superiority to the much-lauded salicylic Bucholz found a very perceptible effect upon the development of bacteria from .002 per cent. of benzoic acid, and that o. r per cent. was absolutely lethal to them.

In regard to the toxic and other actions of the drug upon the human organism we have at present very little information. Schreiber took in two days about half an ounce of it, and suffered only a feeling of warmth in the abdomen, spreading over the whole body, and accompanied by increased pulse-rate, increased mucous secretions, and slight disturbances of diges-Senator (see last number of this journal) has substituted it for salicylic acid in rheumatism, claiming that it rivals that drug in its control over the disease, and is free from its disadvantages. He found that its influence upon the temperature was more slowly exerted than that of salicylic acid, and seemed also less dominant. case of poisoning by either benzoin or benzoic acid has ever been reported. The acid cannot be considered entirely free from toxic powers, however, as Grube found that massive doses of it cause in the dog intoxication, with disturbances of respiration and circulation, and palsy of the hind legs. In rheumatism Senator gives two to three drachms a day.

The revival of the use of the compound tincture of benzoin seems to be chiefly due

to Mr. Bryant. In compound fractures he closes the wound with lint saturated with compound tincture of benzoin, and maintains the application. The results obtained by him are said to be "almost uniformly satisfactory." (London Lancet, 1876, ii. 747.) Any one who will look over an old edition of Pereira will see that this practice very closely simulates or follows that directed by that authority, who says, "But when the edges of the wound have been brought together, the tincture may be carefully applied to the lint or adhesive plaster as a varnish or cement." The ease, simplicity. and cleanliness of this dressing certainly commend it. Mr. Jas. D. Bradburn, surgeon to her Majesty's government in Grenada, especially commends it on account of its efficiency and the readiness with which it may be employed by surgeons working in out-of-the-way places, where appliances are scarce. It would appear as though this treatment of wounds was especially adapted for the exigencies of frontier warfare; and we should be glad if the medical corps of our army would test it, and report the result in our columns.

#### PROCEEDINGS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF PHILA-DELPHIA.

THURSDAY EVENING, NOVEMBER 14, 1878.

THE PRESIDENT, DR. H. LENOX HODGE, in the chair.

(Continued from page 192.)

Heart with lesions of the mitral and aortic valves, from a case of death from pulmonary hyperæmia. Presented by Dr. Louis Starr.

I AM indebted to Dr. J. Cheston Morris for the opportunity of presenting this specimen, and also for the following clinical history, the patient having been under his obser-

vation for a long time before death.

"Mary E. C., aged 34, colored, suffered from inflammatory rheumatism and endocarditis in 1870, and was admitted to the Episcopal Hospital, and treated by Dr. Morris. Recovered, returned to work, but had from time to time more or less difficulty in breathing, and rheumatic pains, for which she was under the care of Dr. Morris. She was not obliged to give up her place or to take to her bed, until a short time before her decease, when she seemed to become feeble and lose spirits, and had a severe attack of gastrointestinal irritation, with some resemblance to typhoid fever. On Monday previous to

her decease, she suffered from very acute dyspnæa; her pulse became feeble, and extremities cold; she was nearly pulseless for twenty-four to thirty-six hours before her death from pulmonary hemorrhage, on Saturday, November 2, 1878."

The post-mortem examination was made

forty-eight hours after death.

On elevating the sternum with the costal cartilages, so as to expose the thoracic viscera, a peculiar, red fringe of tissue was observed, tightly adherent to the fibrous layer of the pericardium, and extending from its point of attachment to the diaphragm, on either side, almost to the base of the heart. This fringe was quite firm in texture, and was about an inch in width, and a quarter of an inch in thickness along the line of attachment: the free edge was thin and irregular. Subsequent microscopical examination by Dr. Simes proved it to be nothing more than intensely congested adipose tissue. The pericardium was thickened, and contained a small quantity of serous fluid. The heart was enlarged, both ventricles being dilated, and the wall of the left slightly hypertrophied. There was stenosis and insufficiency of the mitral valve, the orifice being funnel-shaped and narrowed so as barely to admit the tip of the index finger, while the edges of the leaflets were thickened and roughened upon their auricular surfaces. The aortic leaflets were thickened, and their under or ventricular surfaces were roughened, and covered with firmly adherent fibrinous deposits; one of these extended for an inch or more into the aorta, and interfered with the closure of the valve. The edges of the tricuspid leaflets were thicker than normal, and the pulmonary leaflets were fenestrated, but both valves were fully competent.

The lungs were in a condition of hyperæmia, especially the left, which was dark red in color, and non-crepitant except at the apex and along the anterior margin. On section, blood flowed freely from the cut surface. The liver was large and apparently fatty. The kidneys were moderately contracted. The ovaries were large and congested; the uterus was about the usual size, its tissue was pale and very dense, and connected with it by narrow peduncles were several small, very

hard fibrous tumors.

In connection with this specimen, the following history of a case of cardiac disease, in which death was caused by ædema of the lungs and pericardial effusion, is of interest.

Margaret —, æt. 78 years, a sempstress by occupation, of temperate habits, and having a healthy family record, was admitted to the Hannah Ward of the Episcopal Hospital on November 4, 1878. Her health was good until 1870. Since then she had suffered from time to time from subacute rheumatism, associated for twelve months past with symptoms of cardiac failure. When admitted, she was

in a condition of great prostration, and had constant difficulty in breathing; she had, too, a troublesome cough, attended with the expectoration of frothy mucus, occasionally streaked with blood, and she experienced frequent attacks of angina pectoris. There was no dropsy. The apex-beat of the heart was situated in the fifth intercostal space, nearly on the line of the left nipple; there was slight tenderness over the precordial region, and on auscultation two systolic murmurs were heard, one at the apex, and the other at the aortic cartilage. The physical signs of bronchial catarrh were likewise present. Death occurred on November 12, and was preceded by greatly increased dyspnæa. Numerous small bubbling râles were heard over both lungs during the last twenty-four hours of her life. The autopsy was made thirty-six hours after death, by Dr. Anders, the resident ined first. The pericardial sac was distended with a straw-colored fluid. There was a large accumulation of fat about the heart, and the muscular tissue itself was pale and flabby. All the cavities of the heart were dilated. The edge of one of the mitral leaflets was thickened and roughened, the lesion being quite sufficient to interfere with the proper closure of the valve. The aortic leaflets were increased in thickness, and much less flexible than normal; the aorta was atheromatous, particularly in the vicinity of its orifice. The tricuspid and pulmonary valves were healthy. A few patches of atheroma were observed in the wall of the pulmonary artery close to the valve. The coronary arteries were atheromatous.

There were a few moderately firm pleuritic adhesions at both apices, and at the base of the right and the posterior portion of the left lung. The basal and posterior portions of both lungs, but especially the left, were ædematous. The pulmonary tissue in these positions was reddish in color and soggy, and on section a quantity of liquid, mixed with blood and containing a few air-bubbles, escaped

from the surface of the cut.

The abdominal viscera were normal, the kidneys showing no alteration but congestion.

Carcinoma of the liver, pancreas, and cæliac glands. Presented by Dr. Louis Starr.

Thomas M., æt. 49 years, a laborer, was admitted to the medical ward of the Episcopal

Hospital on October 26, 1878.

His family history was healthy. He had never had syphilis, and had always been moderately temperate in his habits. With the exception of an attack of pneumonia in early life, he had been little troubled with sickness until 1872, when he began to suffer from occasional asthmatic paroxysms, and from dyspepsia and constipation. He had never felt any anxiety about his health, however, until June, 1878, when he noticed that the ingestion of food gave rise to pain in the

epigastrium, and was quickly followed by vomiting, the material ejected being sometimes mixed with blood. Soon afterwards he became jaundiced, and commenced to fail

in flesh and strength.

On admission, he was greatly emaciated and very weak. There was considerable pain in the epigastrium, extending through towards the back; marked, though not intense, jaundice; obstinate hiccough; frequent vomiting of food together with bile-stained mucus, and slight diarrhæa, the evacuations having a green color and containing a small amount of blood.

Upon making an examination of the abdomen, the liver was found to be greatly enlarged, occupying and thrusting outward the epigastric and the upper part of the umbilical and right lumbar regions. The edges of both lobes could be distinctly traced with the fingers, and were thick, firm, and nodulated, while over the anterior surface of the organ several large and many small hard nodules could be perceived through the abdominal parietes. The upper border of the liver, as determined by percussion, was in the normal position. In contact with the left side of the abdominal aorta, just below the margin of the left lobe of the liver, a firm, convex mass could be felt.

Auscultation of the chest revealed dry pleural friction-sounds over the left side pos-

teriorly.

The vomiting ceased soon after the patient entered the hospital, and there was some slight improvement in his general condition; but this lasted for a few days only, and was succeeded by rapidly-increasing prostration and death on November 8.

The post-mortem examination was made

twenty-six hours after death.

On opening the abdomen, the small intestines were observed to be pushed downward and to the right, and the stomach downward, backward, and to the left. The left lobe of the liver filled the epigastric region, extending in the median line three inches and a quarter below the ensiform cartilage. The cleft between the right and left lobes was deep, and occupied a position a little to the right of the median line. The lower margin of the right lobe, anteriorly, was four and a half inches below the ensiform cartilage; laterally and posteriorly it was two inches lower still. The gall-bladder projected two and a quarter inches beyond the edge of the right lobe. The enlargement of the liver was symmetrical, and had taken place chiefly in a downward and transverse direction, the thoracic space not being materially encroached upon, and the border of the left lobe being almost in contact with the left side of the abdominal cavity. The edges of the organ were more obtuse than usual, and its capsule was thickened, especially along the anterior edge of the right lobe and over the superior surface of the left lobe, in which situation it was tightly adherent to the diaphragm. Its weight was nearly six pounds. The hepatic tissue was dark-green in color, and thickly studded with hard white nodules, which were round or oval in shape and varied greatly in size, many being no larger than a No. 6 shot, while others measured an inch, and one, at the under anterior part of the left lobe, two inches in diam-These nodules were somewhat elevated above the surrounding surface, and a few of the largest were umbilicated. The gall-bladder was pear-shaped, was considerably distended, measuring five inches in length by three in width, and was filled with bile apparently normal in color and consistency. The cystic duct was patulous. The hepatic duct with its two branches and the ductus communis choledochus were distended to at least four times their natural size. In addition to this general increase in calibre, there was a saccular dilatation of the common duct a short distance from the point of entrance into the duodenum; and just beyond this sac the duct was compressed by the head of the pancreas. The orifice of the common duct was large enough to admit an ordinary probe. head of the pancreas was tightly adherent to the duodenum, and rested upon and stretched downward to the left of the abdominal aorta the body of the gland extended upward and backward, the tail touching the spleen, which was situated behind the stomach, in contact with the posterior wall of the abdomen. pancreatic tissue was firm, the head especially being hardened, nodulated, and enlarged. The pancreatic duct was considerably dilated. The cœliac glands were greatly enlarged and hardened.

The stomach was moderately large; its mucous membrane was thickened, congested in patches, and covered with tenacious mucus. On the smaller curvature, midway between the cardiac and pyloric orifices, there was a chronic ulcer, oval in outline, the longer diameter measuring about one inch, and being directed transversely to the axis of the stomach. The edges of this ulcer were well defined and slightly inverted. The base, formed by the thickened serous coat of the viscus, was paler than the surrounding mucous membrane, and smooth. In several positions the mucous membrane was eroded, probably by post-mortem digestion. largest of these erosions, an inch and a half in diameter, was situated upon the smaller curvature, near the cardiac orifice. irregular in shape, with an uneven base and ill-defined, everted edges. The mucous membrane of the duodenum was also thickened, and over the seat of attachment of the head of the pancreas there was a large oval ulcer. The long diameter of this ulcer was parallel with the axis of the intestine; the edges were indurated and puckered, and the base seemed to be formed of the pancreatic tissue.

The spleen was healthy.

The kidneys were deeply stained by the coloring-matter of the bile, but were not other-

wise abnormal.

The peritoneal cavity contained a small quantity of serous fluid, and the parietal layer of the peritoneum was thickened, particularly at the upper part of the abdomen. On opening the thorax, the left lung was found to be adherent over its whole surface to the chestwall and diaphragm. The right lung was large and incompletely retracted, the air-cells of the upper lobe and of the anterior margins of the middle and lower lobes being in an emphysematous condition. At the lower edge both of the middle and of the lower lobe, laterally, there was a hard white nodule, slightly elevated above the surrounding lungtissue, the one in the lower lobe, the larger of the two, measuring about half an inch in diameter. The lower posterior portion of each lung was ædematous, and the serous fluid, which escaped freely on section, was tinged The bronchial glands were inwith bile. creased in size.

There was a small vegetation upon one of the leaflets of the aortic valve; in other respects the heart was normal.

The tissues throughout the body were more

or less stained with bile.

The histological examination of the diseased organs was made by Dr. Simes, the pathologist of the hospital, who reported as follows:

"From a microscopic examination of the indurated portion of the pancreas, it is found to present throughout its structure a very great increase of the fibrillar connective tissue, both inter- and intra-lobular. Traversing this tissue are seen round, oval, and longitudinal sections of cylinders, lined with columnar epithelial cells.

"The new formations in the liver consist of similar elements and have an arrangement analogous to that seen in the pancreas.

"A thin section, taken from the margin of the ulcer situated in the duodenum, presents an arrangement of histological elements similar to that found in the liver.

"A section made from one of the enlarged glands taken from the fissure of the liver shows most distinctly the pathological new formation, which is here of the same character as that in the duodenum, pancreas, and liver,—viz., a cylindrical epithelioma."

From this report I am justified in regarding the carcinoma of the liver, the pancreas, and the lymphatic glands as secondary in nature, the primary lesion being seated in the mucous membrane of the duodenum.

Double uterus. Presented by Dr. A. S. REYNOLDS.

S. F., æt. 24 years, died November 13, 1878, from typho-malarial fever. The history of the case, as far as relates to the malformation,

is as follows. She began to menstruate at 15 years of age; was always regular in time, but excessive in quantity. She was married at 19, had first child at 21 and second at 24 years of age, twelve weeks before death. Each confinement was followed by profuse post-partum hemorrhage.

The position of the uterus and appendices was seemingly normal, and they were only removed to examine what was at first thought to be some abnormal growth in the course of the

right Fallopian tube.

On examination, the specimen is found to be a malformed uterus, double in all its parts

above the external os.

The uterus in the line of the genital canal measures two and a half inches in length, is unicornuous, and has a single Fallopian tube attached to its fundus, directly in a line with the cervical canal. The cervix is about one inch in length, and normal in thickness, except in its relation with the cervix of the second uterus to form a common external os, where it is somewhat thinner. While the external appearances indicate a uterus about normal in size and weight, it is seen in section that the walls are thicker and the cavity smaller than normal. As this uterus is the one in which the last conception occurred, it is probable that involution is not yet complete. In the ovary of this side can be seen several Graafian follicles and the corpus luteum of her last pregnancy.

Beginning at the very margin of the external os, on the right side, and running at right angles to the median line, is a canal, but little less in diameter than the normal cervix, three-quarters of an inch in length, expanding into the triangular cavity of the body of the second uterus, which measures one and a half inches in length, two inches in circumference, and one inch in diameter. The walls are about one-quarter of an inch thick. From the fundus is given off the single Fallopian tube, which, being normal, requires no description. The surface of the ovary of this side exhibits the cicatrices of several follicular eruptions.

As special pathological interest in the anomaly is unsupported by accurate clinical data, we will simply advance the following hypoth-

eses:

1st. That the double uterus in some way

explains the constant menorrhagia.

2d. That the complicated arrangement of the cervices may have been the cause of the excessive post-partum hemorrhage.

3d. That, as both organs seemed functionally active, double conception was possible, thus affording a unique and probably fatal

complication of labor.

Report of the Committee on Morbid Growths.

"The histological elements of the portion of tissue submitted to your committee for examination are found to be spindle-shaped cells, containing the characteristic rod-shaped nucleus of smooth muscle-cells, arranged in

laminæ as seen in a section of the uterus; numerous blood-vessels cut in every direction were found.

"December 12, 1878."

Tumor of abdomen. Presented by Dr. James E. Garretson.

This specimen was taken from a tumor situated at the umbilicus of a lady who died at 51 years of age. She weighed two hundred and twenty pounds, and was about five feet five inches in height.

Nineteen years previous to her death, an umbilical hernia, about five or six inches in diameter, made its appearance. She wore a truss, and one of the supports passed over the

lower part of the liver.

She gave birth to five children before the appearance of the hernia, and to five after-

wards, the last seven years ago.

About a year since, pains commenced in the region of the liver, stomach, and umbilicus. Last June the pains became very severe, and soon after she was taken to her bed.

She had no fever during her illness, from last May until the week before her death. Her bowels were moved only after the use of

an enema.

The fæces were whitish and soft; the urine was highly colored and ropy; her body at times was very yellow; she had no vomiting.

Six hours before her death, she had a discharge from her mouth, resembling brokendown blood.

The tumor formed and became hard in the place of the hernia, about six weeks before death.

Report of the Committee on Morbid Growths.
—"A microscopical examination of the specimen presented by Dr. Garretson exhibits the elements and arrangement of a carcinoma, variety scirrhus,—viz., groups of epithelial cells in alveolar spaces; the fibrillar connective tissue constituting the walls of the alveoli is considerable in amount.

"December 12, 1878."

#### PHILADELPHIA COUNTY MEDICAL SO-CIETY.

A CONVERSATIONAL meeting was held at the Hall of the College of Physicians, Philadelphia, January 8, 1879, Dr. Henry H. Smith, president, in the chair. A paper on "In-growing Toe-Nail" was read by Dr. Charles T. Hunter, which, on motion, received a vote of thanks from the Society.

Dr. S. W. Gross inquired whether the operation recommended would prevent a recurrence of the trouble if the patient continued wearing the short, narrow shoes that originally caused it: in other words, is the cure a permanent one?

Dr. Hunter saw no reason why the condition should not return, if the exciting cause were again brought into play.

Dr. S. W. Gross said that, on this account, he would consider the operation proposed not as good as removal of a portion of the nail. and illustrated this by a diagram on the blackboard. If the corner of the nail is imbedded in a mass of fungous granulations, a stout knife should be introduced under the lateral edge and made to split the nail from the root to the free border, separating a narrow strip, including the offending part, which, with its lateral matrix, is then dissected out. A radical and permanent cure may now be expected; and when thus properly performed The tendhe had never seen a recurrence. ency to return after the ordinary operation is such that it can only be considered as palliative, especially where a tendency to the condition is inherited. He agreed with the lecturer that the destruction of the entire matrix is a painful and unnecessary proceeding, and characterized it as a barbarous operation.

Dr. Hunter had performed the operation just described by Dr. Gross, and on several occasions had found that the cicatrix, by pressure of the shoe, is rubbed up against the edge of the nail and produced a return of the ulcer. The corner of the nail left by this operation is a sharp and not a rounded one, and is liable to produce irritation.

The operation proposed in the paper was not devised by Dr. Neill, but was frequently used by him. He improved it by the application of a peculiar instrument and the manner of packing. This leaves the natural rounded border to the nail, in contrast with the operation just proposed. He had performed the operation a great many times, with permanent cures in the majority of cases. As a rule it only required three packings, the first of which is painful, but not the others: cicatrization occurs in a very short time.

Dr. Gross said that he could not understand why, when part of the nail is removed, the trouble would be as likely to return as when the entire nail is allowed to remain. He had tried the plan proposed in the paper, and found that it is extremely difficult to insert the cotton under the posterior portion of the lateral edge near the semilunar fold, and that it caused considerable pain. In removing part of the nail, he would give the patient ether.

Dr. Hunter said that no difficulty is experienced in packing the cotton with the probe made for this purpose. The silver probe of the pocket-case will not do; it is not strong enough, and its end is too thick. He prefers jewellers' cotton for the purpose, and with it he had not had such trouble as Dr. Gross had mentioned,

Dr. Henry H. Smith took the floor, and, after speaking of the frequent occurrence of toe-nail ulcer, and the importance of correct ideas of its pathology and rational treatment, expressed his gratification that the teachings

and practice of Dr. Neill had thus been revived, although he had now been an invalid and great sufferer for a year or eighteen months and hopelessly confined to his room with a distressing malady. Now that his days of usefulness are apparently over, and he is apt to be forgotten by his fellows from being in retirement, it is pleasant to find that his works have not been entirely overlooked, and that justice has been paid him in referring to the treatment of the affection under discussion.

The palliative treatment of toe-nail ulcer is as old as the hills. The term in-growing nail is an unfortunate one, as it gives a false idea of the pathology of the affection. As a rule, it is not in-growing of the nail, but out-growing of the flesh that causes the trouble. False pathology leads to improper treatment. We should direct our attention more to the toe and less to the nail.

The nail grows from the matrix outward, and represents the horny layer of the epithe-lium of the skin. The derm does not cease at the semilunar fold, but is continued underneath the nail to the free border, where it is joined again by the epithelium, and also at the lateral edges of the nail. Pressure of these soft structures against the resisting nail by a short, narrow shoe, or a short stocking, produces irritation and finally inflammation, irritatio ibi affluxus," and the malady may be prevented, and indeed may be cured, by any method that keeps the soft parts from pressing against the nail. It would take too long to review the various plans of treatment that have been proposed for this annoying affection. The plan of packing cotton under the nail and applying a small compress on its side had been in use at the Pennsylvania Hospital for many years, by Dr. Rhea Barton and others, before Dr. Neill adopted it. The plan was to place a pledget of cotton at each lateral edge of the nail, and envelop the toe in a narrow strip of sticking-plaster, thus pressing the granulations away from the nail. To show that a curved nail was not the original cause of the ulcer, Dr. Smith reminded Dr. Hunter of the specimens in the museum of the University of Pennsylvania, where are many examples of hypertrophy of the toe-nail to an enormous degree, some of them from six to nine inches in length. These hypertrophied nails are less apt to cause toe-nail ulcer than the ordinary short nail, because they pass away from the toe on to the back of the foot.

The writer of the paper had very properly referred to the danger of necrosis of the phalanx after cauterization of the matrix; but the pain spoken of is unnecessary, as the speaker had split up the nail and removed part of the matrix whilst the patient talked with a smile on his face during the whole operation, the sensibility of the toe being destroyed by the aid of the local anæsthetic effect of cold, as by

making a small cone of gauze containing ice mixed with salt, hollowing it out, and burying the toe in it until it is blanched. He objected to the plan recommended by Dr. Gross, because if the matrix is allowed to remain the nail will be reproduced. If the soft parts can be drawn away from the nail, the patient will be relieved, but the radical operation is sometimes an absolute necessity. The affection is a very annoying one, and some patients would prefer to submit to amputation of the toe rather than to suffer constantly from it.

Having recently received a letter from a correspondent who desired to be informed concerning Prof. Joseph Pancoast's operation, he inquired if any member present could describe

his method.

Dr. S. W. Gross said that Dr. Joseph Pancoast's operation had been recently referred to in a clinical lecture in the Medical Times (p. 104), and consists in paring off the hyper-trophied skin and applying adhesive plaster to draw the soft parts away from the nail. Dr. W. Scott Wolford had performed the

operation recommended by Dr. Gross, except that he had terminated it by one at right angles to the first, instead of dissecting out

the matrix.

Dr. H. Leaman described a case of syphilitic disease of nail in a child, where he had applied solid nitrate of silver to the matrix to destroy it, and had failed to do so. A second and a third thorough application was followed by the same result.

Dr. McFerran had treated one case with a gum band applied so that the greatest tension was on the bottom of the toe. This was successful in drawing the soft parts away from

the nail, and a cure resulted.
Dr. S. W. Gross reported a case of in-growing nail, where the structure was accidentally split in the middle by a horse treading upon it. The split remains, but the in-growing nail has been permanently relieved. He thought that this expedient of splitting the nail might be resorted to by the surgeon with benefit in some cases.

Dr. S. Ashhurst had been in the habit of cutting out a V-shaped portion from the free border of the nail, as far back as could be done without bleeding, in addition to packing

under the edge of the nail.

Dr. W. R. D. Blackwood said that when in the army he had treated a large number of cases of in-growing toe-nail among the soldiers. He had found that if the nail were removed and he only cauterized to the semilunar fold, it would be reproduced, but that if the entire matrix were thoroughly cauterized, the nail would not return. Lately, he had been in the habit of scraping a groove in the centre of the nail as far down as the patient could bear it, and then packed cotton under the offending edges. During the treatment pressure should be prevented by wearing loose shoes.

F. W.

#### REVIEWS AND BOOK NOTICES.

HARVEY AND HIS DISCOVERY. By J. M. DA COSTA, M.D. J. B. Lippincott & Co., 1879. This brochure of sixty pages is, like all the products of its author's pen, scholarly and well written. It gives a lively and interesting account not only of Harvey, but of other less known men, whose labors paved the way for Harvey, and who in their greatness were only surpassed by him. To any of our readers desiring to pass a leisure hour agreeably and to familiarize themselves with the history of one of the chief founders of modern medicine, we commend the book most highly.

Notes on the Treatment of Skin Diseases. By Robert Liveing, A.M., M.D. Cantab., etc. Fourth Edition, revised and enlarged. New York, William Wood & Co.,

1878. 12mo, pp. 127.

Dr. Liveing's little book begins with a brief account of the morbid anatomy, etiology, classification, etc., of diseases of the skin. Following this come a description of the various diseases, arranged in alphabetical order, and a definition of terms. Of course, in so small a book only the briefest account of the appearances, etc., is possible; but Dr. Liveing is a good dermatologist, and the essentials are usually mentioned. This Liebig's-extract sort of book, however, has its disadvantages: it is not nourishing diet. To the physician in full practice, with no time to read up on specialties, Dr. Liveing's book may be of use: it may be read between the hasty gulps of coffee at breakfast, or jerkily conned while pounding over the cobble-stones, or furtively peeped into on the staircase. Dr. Liveing has placed at the end of his volume a round hundred of formulæ,-like the man who wrote a book and put all his punctuation-marks at the end, so that the reader could place them to suit himself. This is very convenient. Having first caught your hare, so to speak, or made your diagnosis, Dr. Liveing will provide you with a formula to suit. Good as this book is (and it is very good of its kind), we cannot recommend it to any one desiring a knowledge of skin diseases. As a table-book for the practitioner, it is, so far as it goes, sound, and for the most part trustworthy.

LECTURES ON LOCALIZATION IN DISEASES OF THE BRAIN. By Prof. J. M. CHARCOT. Translated by EDWARD P. FOWLER, M.D. New York, Wm. Wood & Co., 1878.

THE LOCALIZATION OF CEREBRAL EASE. By DAVID FERRIER, M.D. DIS-New

York, G. P. Putnam & Sons.

If there have been in modern times any researches to which the German title of Bahnbrechende—path-breakers—is properly given, surely it must be those of Hitzig and Fritsch in Germany, and of Ferrier in England. Cerebral localization, indeed, was not then first born as an idea; it did, however, have its birth as a reality, passing at a bound from

the cloud-land of speculation to the firm basis of an experimentally proven doctrine. Although since the first memoirs the work accomplished is very great and the progress made has been very marked, no two workers have done more than those the titles of whose books surmount this notice. This fact alone gives great value to the two books, which are not compilations, but contributions of a most valuable kind to one of the most interesting of medico-physiological problems. The two volumes also are similar in that they are both fragmentary; but here the book of Ferrier has the great advantage, in being the complement of a previous work ("Functions of the Brain," New York, G. P. Putnam & Sons, 1876), whilst that of Charcot is the beginning of a work, an opening of the subject, not yet completed, and, judging from the previous writings of its author, never to be completed. To those who have Ferrier's first volume, the second must follow as naturally as though the two had been originally announced as one publication. Charcot's book is by no means included in that of Ferrier. It is, indeed, largely an anatomical study of the brain, and as such demands a place among the favorites of those who would thoroughly understand and compass cerebral localization: in its study of the cerebral circulation it must open new thought-territories to students not familiar with the labors of Duret and of Heubner.

CONSPECTUS OF ORGANIC MATERIA MEDICA AND PHARMACAL BOTANY. By E. L. SAYRE, Ph.G. Philadelphia, Dr. G. Brinton. This book is of no interest to the practitioner of medicine: prepared by a graduate of pharmacy for the wants of students of pharmacy, it is scarcely applicable to the needs of the medical student. As far as a person who is not a pharmacist can judge, the book meets well the requirements of those for whom it is

intended.

THE PRINCIPLES AND PRACTICE OF SUR-GERY. By JOHN ASHHURST, M.D. Second Edition, enlarged and thoroughly re-

written. Philadelphia, H. C. Lea. Conscientiousness and thoroughness are two very marked traits of character in the author of this book. Out of these traits largely has grown the success of his mental fruit in the past; and the present offering seems in no wise an exception to what has gone before. The general arrangement of the volume is the same as in the first edition, but every part has been carefully revised, and much new matter added.

A Manual of Physical Diagnosis. By FRANCIS DELAFIELD, M.D., and CHARLES F. STILLMAN, M.D. New York, Wm. Wood

& Co., 1878.

This very thin quarto of thirty pages contains, in a clear, condensed form, all the essential elements of the subject upon which it treats. It is systematic, and sufficient for the needs of the student, but for the practi-

tioner is not to be compared with the larger treatises in vogue. Its claims for usefulness above its competitors consist in its being interleaved, so as to allow the student to take notes in it, and in its being illuminated with "superimposed plates," which we are informed in the preface are of "much practical value." This may be the case, but we confess our inability to discover the nature or kind of the value, whereas we do see that by reason of their necessitating the present awkward form of publication, and adding greatly to the expense of the book, these superimpositions are a doubtful gain. To those whose more penetrating gaze can look through the various layers to the practical beyond, we heartily commend the brochure. ARRANGEMENT OF DRUGS OF THE UNITED

STATES PHARMACOPŒIA ACCORDING TO THEIR NATURAL ORDERS. By F. MARION

MURRAY, Ph.G., M.D.

This large chart is certainly capable of a useful purpose as an ornament to the walls of the medical and pharmaceutical rooms for daily study and reference. A candidate who should by it daily examine himself as to his knowledge of the drugs of a certain number of families would soon get to know himself so far as concerns his knowledge of materia medica.

#### MISCELLANY.

DR. JOHN B. BIDDLE, Professor of Materia Medica and Therapeutics in Jefferson Medical College of this city, died January 19, after an illness of about two weeks. He was the author of an elementary treatise upon materia medica, which has been very widely used by medical students; but his posthumous reputation will rest almost solely upon the enthusiasm and affection inspired by him in the lecture-room and by personal contact with the large classes he has taught through successive winters. Tall and commanding in person, with a dignified and kindly carriage, he was not only a medical orator, but also a rarely excellent dean and executive officer. He had long suffered from severe gouty ail-ments, but his unexpected demise leaves a vacancy in the faculty not easily properly filled. At the time of his death Prof. Biddle was in the sixty-fifth year of his age.

POISONING BY CHLORATE OF POTASSIUM.— Two children of a Dr. Kaufmann took each about half an ounce of chlorate of potassium. The youngest child, a girl two years and a half old, had severe vomiting, which lasted for seven hours, when she died of gastritis, in spite of all help. Another remarkable symptom of the poisoning was the profound leth-argy of the child, which probably prevented its showing symptoms of pain.—British Med-

ical Journal, December 28.

FORMERLY the American physician who

desired a reliable pepsin had to look abroad, and the name of Boudault was almost a med-Now, American pepical household word. sins are securing the world's markets. Prominent among these native brands is the lactopentine of the New York Pharmacal Association. How much of its virtues may be due to the ptyalin, diastase, and pancreatine in it may be considered doubtful, but in our experience the preparation has acted as well upon patients as has any other pepsin we ever used.

THE number of deaths directly or indirectly caused by alcohol is undoubtedly very great, although in this country certainly not so great as Dr. B. W. Richardson estimates for Great Britain, namely, one-third the adult deaths. Some statistics collected by Dr. Morton, of London, seem to show that Dr. Richardson decidedly overshoots the mark, as, indeed, is to be expected of a temperance reformer. Even Dr. Morton, however, believes that more are killed by alcohol than by any one disease. The Harveian Society of London have appointed a committee to examine into the matter, and it is probable that they will get us some definite information.

DETERRENT EFFECT OF CAPITAL PUNISH-MENT.-In the canton of Fribourg, which has 110,000 inhabitants, there were only seven cases of murder in the ten years between 1864 and 1874. In the latter year the punishment of death was abolished throughout the Confederation. During the three years immediately following that event no fewer than fifteen murders were committed in the canton, while this year alone there have been five cases of homicide, making altogether twenty in four Thus, when capital punishment prevailed, the murders were at the rate of less than one a year; now they occur at the rate of five a year.—Medical Press and Circular.

### NOTES AND QUERIES.

#### A CORRECTION.



In our last issue, No. 291, the fenestra or mouth of the tubule, alluded to as "seen in the figure under the loop," in Dr. C. H. Burnett's article on the modification of 'Blake's-Wilde's aural polypus snare, was accidentally broken off on the press. The corrected figure of the end of the instrument, showing the fenestra, is here given.

BLOCKLEY HOSPITAL, January 1, 1879. To the Editor of the Philadelphia Medical Times:

To the Editor of the Philadelphia Medical Times:

Dear Sir,—My attention has been called to the fact that many people in testing urine for the presence of glucose by means of the reduction of bismuth have so modified Böttger's test as to render it a source of error in diagnosis. The test is frequently performed as follows: Add to the suspected urine in a test tube a few grains of subnitrate of bismuth, then add an excess of liquor potassæ, and boil.

The error is that the subnitrate of bismuth will be easily reduced to the black oxide of bismuth without the presence in the urine of the least trace of glucose. If water be substituted in place of urine, the result will invariably be the same. The liquor potassæ will reduce the subnitrate of bismuth easily in

the presence of heat, and the black oxide will collect in the bottom of the containing vessel.

The proper manner in which to perform Böttger's test is to add to the suspected urine a few drops of dilute solution of nitrate of bismuth in nitric acid, render the liquid alkaline with carbonate of sodium, and boil. In the absence of glucose there will be merely the white precipitate of hydrate of bismuth, no matter how long it is boiled; but in the presence of the least trace of glucose the hydrate will become oxidized and the black precipitate will be produced.

Yours, very respectfully,

H. M. WETHERILL, JR.

#### A STORY OF SCIENCE.

BY ONE WHO KNOWS NOTHING ABOUT IT.

A philosopher sat in his easy-chair, Looking as grave as Milton; He wore a solemn and mystic air As he Canada balsam spilt on A strip of glass, as a slide to prepare For a mite taken out of his Stilton.

He took his microscope out of his case, And settled the focus rightly:
The light thrown back from the mirror's face
Came glimmering upwards brightly.
He put the slide with the mite in place, And fixed on the cover tightly.

He turned the instrument up and down Till, getting a proper sight, he Exclaimed, as he gazed with a puzzled frown, "Good gracious" and "Highty-tighty," The sight is enough to alarm the town! A mite is a monster mighty.

From t'other end of the tube, the mite Regarded our scientific.

To his naked eye, as you'll guess, the sight
Of a man was most terrific,
But reversing the microscope made him quite
The opposite of "magnific."

"One sees the truth through this tube so tall." Said the mite as it squinted through it:
"Man is not so wondrously big, after all,
If the mite-world only knew it."

Mem. Whether a thing is large or small, Depends on the way you view it!

-Fun

#### OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY FROM JANUARY 12 TO JANUARY 25, 1879.

IRWIN, B. J. D., MAJOR AND SURGEON.—Par. 7, S. O. 176, A. G. O., August 15, 1878, granting him one year's leave of absence, is amended to grant said leave on Surgeon's certificate of disability. S. O. 16, A. G. O., January 20,

KOERPER, E. A., CAPTAIN AND ASSISTANT-SURGEON.—The leave of absence granted him by S. O. 110, headquarters Department of the Platte, December 3, 1878, extended three months. S. O. 12, A. G. O., January 15, 1879.

LORING, L. Y., CAPTAIN AND ASSISTANT SURGEON.—Relieved from duty at Fort Hays, Kansas, to proceed with Company B, 23d Infantry, to Fort Dodge, Kansas, and there report to Col. Jeff. C. Davis, 23d Infantry, for duty to accompany the troops of his command and take post with them. S. O. 12, Department of the Missouri, January or 1870. uary 20, 1879.

WILCOX, T. E., FIRST-LIBUTENANT AND ASSISTANT-SUR-GRON.—Granted leave of absence for four months. S. O.

16, c. s., A. G. O.

BARNETT, R., FIRST-LIEUTENANT AND ASSISTANT-SUR-GEON.—Assigned to temporary duty at these headquar-ters from 2d inst. S. O. 3, Department of the Platte, January 6, 1879; and 5 of January 14, 1879.

GRAY, C. C., MAJOR AND SURGEON.—Retired from active service, in conformity with Section 1252, Revised Statutes. S. O. 8, A. G. O., January 10, 1879.

### PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, FEBRUARY 15, 1879.

#### ORIGINAL COMMUNICATIONS.

FUGITIVE THOUGHTS ON DIPH-THERIA, ITS TREATMENT, CASES, ETC.

BY JAMES L. TYSON, M.D.

MUCH has been said and written on this subject, and but little reliance is placed on the general treatment promulgated from time to time, while the prevalence of the disease in various sections of the country, and its alarming mortality in some, have caused many to almost shrink from encountering it. modes of treatment have been as various as the colors of the kaleidoscope, though not of equal symmetry and beauty; for while one physician will keep his little patient pleasantly fuddled on brandy (alcoholism), another will flood the infant system with that harmless article, quinine, till it has reached the point playfully denominated cinchonism; and still another, with equal pleasantry, will rapidly "throw in" that other harmless drug, the mild chloride of mercury, and the little tortured sufferer is well when he happily voids "polyps."

Though from these varied "experiences" we may glean some hints, practically they would seem better adapted to certain malarious sections in our Western country than to this locality; for while some here have pronounced them to be decidedly a new order of treatment, verging on the heroic, others have been content, with more euphemistic phrase, to say sub-The quinine treatment, under certain conditions or in peculiar phases of the disease, may become not only advantageous but a necessity. There are doubtless cases that recover "in spite of the treatment," as there are others which will not recover whatever it be.

Some years since, I was called in consultation to a girl twelve or thirteen years old, dying, as her father said, from diphtheria. Three children of the family, I was informed, had died a few days before of the same disease. I found the case a sad one indeed. The whole pharynx, including the anterior and posterior half-arches, tonsil glands, velum palati, uvula, and back to the posterior nares, the Schneiderian membrane being involved in its whole

extent to the nasal orifices, where it could be seen, was coated with a thick, tough. yellowish membrane. The larynx was, of course, implicated, there being complete aphonia, even to whisper. She was in a lamentable condition, very prostrate, and unable to take any nourishment save the blandest liquids, a teaspoonful of milk oc-casionally, and by her manner denoting a horrible sense of impending suffocation. As something must be done to afford relief at once, I suggested, and applied by the request of the family physician, a strong solution of nitrate of silver, -3ij to 3j,—with a curved probang, to every part that could be reached throughout the pharynx. It was rapidly done; but while making the application I observed the membrane curl at its edges after being touched by the nitrate. To these I applied a pair of curved dressing-forceps, and eventually detached nearly the whole mass, as one would peel an orange. It afforded her great relief. Without going further into the case or detailing the subsequent treatment, it may suffice to state that she ultimately recovered; but a year elapsed before her health was at all established. She is now the mother of three children. One object in stating this case is to manifest under what desperate circumstances recovery may occur in this disease, and to illustrate by it, and another I shall refer to, the allegation that the disease is a systemic and not altogether a local affection, though securing a lodgment first on those parts—the throat and its appendages where germs are most likely to be early established. Whilst in attendance on this girl I observed another, about four years old, looking languid and anæmic, seated on its mother's lap. No reference was made to her till I had asked the question if she were in good health. The mother replied that she had always been, till within the last two or three days she seemed to have lost appetite and was weak and pale, but complained of nothing in particular. Suspecting diphtheria, I at once examined her throat, along with the attending physician, but could detect no deposit, only a slight increase of vascularity, which gave her no uneasiness, nor was there the least enlargement of the glands, either internally or externally. The heart's and respiratory murmur, though feeble, were normal. We ordered her chlorinated iron, a stimulant

tonic, beef-tea, etc. On the following day the child died, very calmly, from asthenia the result of systemic poisoning. The two cases, though not typical of all, are sufficiently so to exhibit the dissimilarity, to put no finer point upon it, between the affection in question and membranous croup,—with which some have chosen to confound it,-to satisfy the doubts of the most casual observer. croup, death is caused by asphyxia or stasis in the radicles of the pulmonary veins; in diphtheria, by asthenia, -systemic poisoning,—unless the larvnx be involved, when stasis in the pulmonary capillaries hastens the end. There are so many points of difference in almost every phase of the two maladies, often treated of, and known to most, that it would be superfluous to I am unable for a rehearse them here. moment to entertain the idea of there being any more definite analogy between them than that the same parts are not unfrequently implicated, the one by an exudation, the other by a deposition; but that they constitute one and the same disease, pure and simple, I utterly reject.

One object in penning these lines was to refer to a treatment for diphtheria, not new certainly, for there has already appeared a synopsis of it in the Times, but the best, decidedly,—with occasional slight modifications to suit cases,—that has been presented to the medical world. It is the frequently repeated small dose of tinct. ferri chloridi, and sol. potassii chloratis, alternately every half-hour, following each for two or three minutes with a spray from a hand-atomizer, of lig. calcis and carbolic acid. (As the formulæ have been given in the Times, it is hardly necessary to repeat them here, but I will append them to this paper, and you can use them at your discretion.) These remedies have been long employed, but never before in the manner or frequency advocated by Dr. C. E. Billington. He has reported great success in the treatment of this often tractable malady, and speaks of it in that modest, straightforward manner which carries conviction and compels assent to his earnest words.

During the past three months I have had occasion to test its value in thirteen cases of diphtheria, six of which occurred in one house, two in a second, and five in a third, and with the most gratifying results, for all recovered, though some of them

were of a very serious type. Among the six children, ranging from thirteen to two years old, equally divided as to sex, a little boy was first attacked. The mother, suspecting nothing serious, employed some domestic remedies, which gave no relief, for in about twenty-four hours the throat affection became intolerable and the child grew so weak as to be scarcely able to stand. was then sent for, and on examining the throat found the unmistakable deposit on the tonsil glands and uvula, spreading to various parts of the pharynx, the mucous membrane which the deposit had not reached presenting a highly inflamed, glazed appearance. I immediately began the treatment as indicated above, and in about eight days his throat was entirely cleared, and he was well. But, in the mean time, one and another and another child became affected, till all had imbibed it and were subjected to the same process. One little fellow of two years, who had suffered the previous spring for nearly two months from a severe attack of lobular pneumonia, I feared it would go hard with, but he most surprisingly got through without any serious complication. Where the patient is early seen. there is every probability that the malady may be arrested; but if there be delay in the treatment, the result is often extremely doubtful.

In the other family of five, a little boy five years old was taken with what appeared to be tonsillitis or mumps,—for I did not see him during the first three days, and rapidly grew worse. I was summoned to him in great alarm, he being an only son. I found the pharynx, tonsil glands, and uvula very thoroughly pasted. little fellow could scarcely speak in a whisper, and answered questions by a nod or shake of the head, and, being ordinarily a great talker, the inference was that the glottis and upper larynx participated in the disease, and he either could not speak or the effort to do so was painful. In ten days he was well, an improvement being observed in the first few days. About a week thereafter, his sister, nine years old, was taken with the disease, having large patches of deposit on both sides of the pharynx, with accompanying prostration, and on the third day of her sickness the mother took it and was seriously ill, and in three days more the nursing infant of three months old.

I treated all of these alike, but in addi-

tion to the spray had boiling lime placed in a suitable vessel on a small kerosenestove, and thus a continuous vapor was diffused through the apartment. This was important for the baby particularly, as the hand-atomizer could not be used for one so young. I had serious doubt of her feeble little life surviving the inroad of so grave a malady. Her color and appearance resembled putty, and her pitiable moan—for she was unable to crv—was very distressing. She refused to nurse, and rejected the bottle, to which she had been accustomed,—for what lady, in this enlightened nineteenth century, does not bring up her baby mostly or largely by hand? For three days the poor child was only fed on a teaspoonful of milk and a few drops of brandy occasionally. I had three beds in the same room at one time, and the office of the nurse was no sinecure. mother, daughter, and baby were treated alike, the latter receiving her medicine with the others—only one-third the amount -every half-hour, omitting the spray. In twelve days, dating from the time the first of the three disclosed any symptoms, they were all well. The length of time would not have been so great, but both mother and daughter relinquished their medicines too soon, when renewed diphtheritic patches, with accompanying prostration, demanded their resumption. It is always most prudent to continue the medication, somewhat prolonging the time between each dose, and the spraying, for two or three days after apparent recovery. Lastly, the husband and father took the disease, and it handled him more severely than any of the others, except the baby. There was considerable change in the voice and hoarseness for the first three days, the diphtheritic deposit extending back to the posterior nares, on the Schneiderian membrane, and deep into the œsophagus. The constitutional symptoms, too, were more marked, utter prostration, and lancinating pains, darting from the throat to the eye and ear of the affected side, were very distressing. One side of the pharynx and cesophagus appeared to be the most involved, and was coated with a thick, leathery deposit, while the corresponding tonsil, parotid, cervical, and submaxillary glands were intensely swollen, painful, and sensitive. He could take nothing but fluids,—beef-tea, milk, and eggnog: the difficulty in swallowing even semifluids, such as oatmeal-gruel, was extreme,

on account of the excessive pain to which it gave rise. Touching the parts about half an inch below the angle of the jaw, where the pain and soreness were most severe. with a long, curved camel's-hair pencil armed with a strong solution of chloral in glycerin,\* afforded great temporary relief; and, when the almost intolerable agony and tenderness along the glands of the neck were greatest, bathing the parts very gently with a strong solution of camphor in sulphuric ether was for a time a source of much comfort. The half-hour doses and spraying, along with vapor of lime in the room. as in the other cases, were never inter-At the end of ten days the diphtheritic character of the disease was entirely removed, but the throat presented a highly inflamed, swollen appearance, and I greatly dreaded implication of the larynx,—which fatal combination, a few days previously, was said to have destroyed the Princess Alice of Hesse-Darmstadt. My patient, indeed, was in a very critical condition, the blandest fluids being taken with the greatest pain and difficulty. He complained at this time of pains in the limbs and chilliness, followed by flushings, similar to what he had experienced when suffering from fever on the Mississippi River, and subsequently on the Isthmus of Darien, where he was detained after leaving the fleet in the Pacific. At that time he was a young and gallant officer of the navy, having participated in all the conflicts of Farragut on the "Hartford" during the war. It was a satisfaction to be instrumental in aiding to preserve the life of such a man.

Suspecting that his present condition, with an aggravation of the old and a development of new symptoms, was due to the malarious taint of which he had so long been an occasional victim, and still administering the chlorate of potassium and iron, but at longer intervals and in diminished quantity, and a spray of half a grain to the ounce of chloral hydrate and limewater, I gave him antiperiodic doses of quinia three or four times a day. The changed spray he especially lauded as very grateful, being soothing and cooling to the inflamed and sensitive parts, on which ice exerted no influence whatever. Thus em-

<sup>\*</sup> Dr. Cesare Ciattaglia, an Italian physician of Rome, claims to have obtained great success in eight cases of diphtheria by applying to the throat, three or four times a day, a solution of 3i chloral hydrate in 3v glycerin, along with the internal administration of 3its to 3iv chlorate of potassium dissolved in water, throughout the twenty-four hours, for children, and 3i for adults.

ployed, chloral is the best antiseptic extant. In twenty-four hours he was better, and in forty-eight hours much improved, having no return of the aching and chilliness, while the throat presented a healthier aspect and the pain was very materially diminished. In a few days thereafter he was well and relinquished all medication.

One can only be a propounder of the etiology of this disease. Its infection or contagion is not admitted by some. The idea of its conveyance by fomites I reject. Of its infection to a certain extent there can be no doubt, as when an individual takes the breath of one laboring under it. How else shall we explain the fact of an entire family, in close intercourse, becoming subject to it one after the other, or of a physician taking it from his patient? kiss on the lips of her child is said to have conveyed it to the Princess Alice. it is not infectious or contagious, in the generally received axiomatic signification of these terms, is apparent. Two children of the latter household whose cases I have detailed, though excluded from the room of the sick, and kept in another part, daily passed the door a dozen times, and were in almost constant intercourse and slept with two waiting-maids who each day passed through the room frequently, yet neither of the four contracted the disease. What gives rise to it? Noxious effluvia, impure gases from decaying vegetable matter, miasm and malaria from "bogs, fens, flats." etc.? But these are the alleged origin of other diseases, such as typhoid fever, etc. But why should it be diphtheria and not typhoid fever? In all the cases of diphtheria or typhoid fever which have come under my observation, and they have been numerous, there were outside contiguous causes or inside influences adequate to justify the dogma that the germs of disease are developed, not originated, in the putrescence of decaying vegetable matter. In the three families referred to, but especially in that of the latter, the cause was patent to all. The authorities had opened a road alongside the yard, encroaching several feet on their residence; but, instead of taking the precaution to grade it to a declivity near by, an excavation was made just at the point where the garbage and sewage from the kitchen passed off through a drain, and here it collected, exposed to the heat of the summer and fall months, causing an offensive

atmosphere and nuisance in the vicinity, and just by where the little fellow who was first attacked was accustomed to play. Though repeatedly notified and urged to remedy their defective drainage, it was criminally neglected till after disease had invaded the mansion and jeopardized the lives of its principal inmates.

Faith in the germ theory, or the doctrine which concedes to every zymotic disease a special germ from without, which originates it, would seem to be the only philosophical and rational conclusion, as it affords the one plausible elucidation to this otherwise occult and mysterious problem regarding their etiology. The question may recur, To what arcana of nature do these germs owe their origin? Do they not, as entities, float in the atmosphere and circulate in the air we breathe, oftentimes of such extreme tenuity as to be scarcely appreciable by the aid of a powerful microscope? They are le poison subtil pervading all space, only developed into active vitality and deleterious properties under certain favorable circumstances. when, inconceivably multiplied and widely disseminated over the land, they are truly "the pestilence that walketh in darkness," soon to become "the destruction that wasteth at noonday."

I append Dr. Billington's formulæ:

- R Tinct. ferri chloridi, f3j-f3iss; Glycerinæ, Aquæ, āā f3j.—M.
- R Potassii chloratis, 3ss-3j; Glycerinæ, f3ss; Liquoris calcis, f3iiss.—M.
- & Acidi carbolici, mxv; Liquoris calcis, f3vi.—M. For spray.

TWO CASES OF ANÆSTHESIA WITH SOME METALLOSCOPIC EXPERIMENTS.

BY JOHN GUITÉRAS, M.D.,

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I HAVE had an opportunity of testing the so-called metalloscopic phenomena in two cases of anæsthesia. The results have been no less bewildering than is the literature of the subject.

The *Times* for November 23, 1878, contributes with a leader to the history of metalloscopy. I venture to add some facts

and references. In the first place, it must be distinctly understood that the experiments of Bennet with pieces of wood have failed at the hands of those who, like Burg and Charcot, believe that there are peculiar susceptibilities to one or more of the metals; that in testing the effects of these they have been found generally the same, though the patient was not aware of the nature of the object used. (See discussion in the Clinical Society of London, reported in the Lancet for November 3, 1877; also "La Métallo-thérapie dans le Service de M. Verneuil," by Dr. Burg, in Gaz. Méd. de Paris, September 1, 1877. The Lancet for November 17, 1877, contains a letter from Dr. Althaus on the subject.)

It should also be remembered that if in cutaneous anæsthesia the patient may know what to expect from these experiments, this is certainly not the case with the disorder of vision called achromatopsy. Here the patient has lost perception of one or more colors. If one color alone is lost, it is the violet; if two, the green is added; and in regular succession the others may follow, viz., red, orange, yellow, and blue. Now, suppose that the three first were lost; if the metallic plates are applied to the forehead, the perceptibility of the colors will return in the regular order, -red, green, and violet, —to disappear afterwards inversely. Report of Biol. Soc. of Paris, in Gaz. Méd. de Paris for February 16, 1878; also the interesting experiments of P. Regnard in same journal of February 23; also the application of these observations to the treatment of some cases of asthenopia, by Abadie, reported in the Lancet for July 20,

In the Report of Biol. Soc. of Paris, Gaz. Méd. de Paris, November 10, 1877, Romain Vigoureux defends very ably the electrical theory. He finds the results to be considerably modified by the superposition of different metals upon the one originally active. He likens the phenomenon to that taking place in a voltaic pair.

Finally, the same author, in the same journal, May 4, 1878, "De l'action du magnétisme et de l'électricité statique sur l'hémianesthésie hystérique," reports the results of successful experiments with these two agents. In using the magnets, contact with the skin was always avoided. The effects were even more marked than with metallic plates. The poles of the magnets were found to be the active parts; not so the

neutral lines. Also in Report of Biol. Soc., Gaz. Méd., June 1, 1878, he states to have obtained successful results from the application of magnets in a case of organic hemi-anæsthesia.

Case I. Organic hemianæsthesia. Failure of metalloscopic experiments.—Elizabeth A., æt. 49, admitted January 4, 1878. Intemperate, syphilitic, consumptive. Four or five years ago had cephalalgia and "lumps in the head." She was treated in the surgical wards, at that time, for "syphilitic caries of the frontal bone." There was probably some meningitis of the base, or disease of the temporal bone, for she had then loss of hearing of the left side, and paralysis of the facial, with ulceration of the cornea. A year later she woke up one morning and found the

whole left side to be paralyzed.

Present condition. There is a deep depression in the frontal bone, at the margin of the hair, one inch to the right of median lines. She has slight motor paralysis of left extremities, with some impairment of electro-muscular contractility. The leg is the seat of occasional painful spasms. There is complete paralysis of the left facial nerve. This region shows wasting, and does not respond to any electrical stimulus. There is absolute cutaneous anæsthesia and analgesia of the left side of the body. She has probably two distinct lesions, one peripheral, involving the fifth, seventh, and eighth pairs, and one central, affecting more particularly the posterior part of the internal capsule.

On three different occasions I tried the effect of the metallic plates. I applied four five-dollar gold pieces, and held them with moderate pressure for fifteen minutes. A gold watch, and silver and copper coins, were also tried. There was no response whatever. Her pulmonary symptoms improved very rapidly under the use of large doses of iodide of potassium, and she asked for her discharge before I had an opportunity of inquiring more carefully into her nervous

symptoms.

Case II. Hystero-epilepsy. Irregular anæsthesia.—Cora S., æt. 34, admitted to the Philadelphia Hospital, February 2,1878. There is no hereditary predisposition to nervous diseases. She menstruated at the age of sixteen, and was a perfectly healthy girl when she entered the army, to follow her lover, in 1862. She served as a drummer-boy until the end of the war. Whilst in the service she did not menstruate. Soon after her discharge she became pregnant, and aborted. One or two months later she became very "nervous," "took to shaking," had the "blind staggers," and was in the habit of laughing and crying inordinately. She has had "fits" these last eight years, once, twice, and three times a month.

She came under my care in August, 1878. Haggard, emaciated, pale; though quite fre-

quently the face is inordinately flushed. Some days she is quite active, at others she seems just able to drag herself along. She menstruates regularly, but the discharge is very pale. The bowels are costive, the appetite irregular, and the urine abundant.

The "fit" starts with a distinct aura from the pelvic cavity. It gives her plenty of time to prepare for the attack. There is also a feeling of malaise for hours before the seizure. During this time she eagerly asks for bro-mide of potassium, which if taken in time, she says, is sure to avert the fit. The aura she describes as "something heavy rolling" in the pelvis; then she feels "the blood rushing" from that region, a frightful oppression about the præcordia, a sensation of choking, a rush of blood to the head "like the humming of bees," and then she loses consciousness and the convulsion commences. I have only once seen her in a fit, but I am told that the phenomena are always the same. She turns partially on her left side. face is purple; the eyes are turned to the left; the mouth is open, and the tongue is seen to be violently twisted, the tip being raised and thrust to the left. The only clonic spasm about the face is produced by the interrupted contractions of the left platysma, horribly dragging down the left corner of the mouth. The body and limbs are rigid. The arms, stretched forward, are the seat of rather slow oscillations. The left arm is somewhat caught under the body. The fingers are spread out inordinately. The left leg is fixed in violent extension, and the right, extended at the knee and ankle and partially flexed at the hip, oscillates with the rest of the body. She froths at the mouth, but does not bite her tongue. The paroxysm may last over a minute, the convulsions gradually lessening. Another paroxysm may follow immediately, before she returns to consciousness. She generally has five or six in succession, or they may extend over twenty-four hours, with intervals of consciousness. Deep coma is apt to follow each seizure.

Twice has the temperature been taken after the paroxysms. Once it was  $99\frac{1}{2}^{\circ}$  Fahrenheit immediately afterwards, next morning it was  $98^{\circ}$ , but an hour later she had a chill, and the temperature rose to  $100\frac{1}{5}^{\circ}$ , and remained above  $99^{\circ}$  until the next morning, when it fell to normal. On one other occasion it was found not

to ascend over 992°.

She has tenderness over both ovaries, especially the left. Steady pressure on the latter made her wince, and cry out, "It will give me the fit." The paroxysm witnessed by myself was instantly arrested by firm pressure on the ovary. The same procedure has succeeded once again, but has failed at other hands.

The anæsthesia is usually irregularly distributed over the body. Sometimes it is general, including the senses of taste and smell.

Rarely is it absent, and then she is very bright and active. There is loss of the sense of temperature. The anæsthetic limb feels numb, and I generally find by the dynamometer that it is three or four degrees weaker than the opposite one, if the latter is not affected. The extremities are always cold. I have never found the flexor surfaces of the elbow-joint anæsthetic, and the popliteal spaces very seldom. There is absolute analgesia. Needles may be introduced into the flesh, and pushed from within outward, without eliciting any pain. Sometimes she complains one or two minutes after the puncture. The areas not anæsthetic are hyperæsthetic. There is also ischæmia of the affected surfaces.

The irregular distribution of the anæsthesia may be illustrated by the following note, taken September 20, 1878. There is hyperæsthesia of flexor surfaces of elbows, of the palm of the right hand, the region of right trapezius down to the level of the spine of scapula, and an area between the right cheek and ramus of the jaw. The cheeks, though red (passive), are anæsthetic together with the rest of the body. The lines of demarcation of these areas are very sharp. Her attention may be called elsewhere, and yet she will jump, by a reflex act in fact, as soon as I transgress upon the healthy skin.

I have been led to give in detail a history of this case because it is a typical example of hystero-epilepsy or epileptiform hysteria. For further information I would refer the reader to Charcot's Lectures on Diseases of the Nervous System. I may state, however, that the character of the convulsions, the hysterical manifestations, the ovarian phenomena, the anæsthesia, the absence of any marked elevation of the temperature after the convulsions, the age at which the fits first appeared, without any evidences of syphilitic or other organic cerebral disease, are features sufficient to exclude the diagnosis of epilepsy and to class this disease in the group of hysterical affections.

Up to December 13 repeated metalloscopic experiments were tried, after the fashion described in the previous case, without results. Sufficient "expectant attention" was bestowed by the patient, myself, and others upon the anæsthetic surfaces to awaken the most dormant sensibility, were it in the power of such fixation of attention so to do. The patient herself tried some little experiments. She informed me once that she had succeeded in making the punctures bleed by the application of a hot cent,—copper being the

limit of her metallic armamentarium. I found that for this purpose the coin had to be heated to a degree unbearable by

any healthy skin.

On the above date, the left arm being hyperæsthetic and the right anæsthetic, I wrapped a lead strap four turns around the right forearm. In two minutes and a half the transfer phenomenon was fully developed. The right arm, from the insertion of the deltoids to the fingers' ends. had become hyperæsthetic. The patient complained of "a rush of blood" in the right shoulder, and a feeling of warmth under the strap. A shorter strap was then placed about the left forearm, but no change took place until the one on the right side was removed, when in less than two minutes the left arm became sensitive. During the experiment none of the punctures bled. Perhaps they were very superficial. Both legs being anæsthetic, the straps were simultaneously applied to them, with successful results.

Since then the coins have been tried in vain: but a metallic tape measure (steel?). an ordinary bandage, and finally encircling the limb with my hands, have produced effects similar to those of the lead straps.

To test the effect of expectant attention, I tried the following experiment. patient in bed, I threw up the covers, arranging them so that she could not see her legs, but at the same time concealing this purpose. The left leg was anæsthetic, the right was not. The heel was kept slightly elevated from the bed, as had been done in previous experiments. I wrapped the lead tightly around the limb, but removing one turn as I applied the next, and finally leaving the limb bare. During the operation I asked her if I was pressing too hard. She did not feel it. The limb was held up for fifteen minutes, and meanwhile I asked her several times whether the strap was not too tight. She did not feel This was her usual answer when the strap was applied, so that the delusion was complete. No change whatever occurred in the distribution of the anæsthesia.

My experiments with the color vision have failed, on account of the varying and

careless answers of the patient.

It is not very easy to make deductions from these experiments; yet the impression is strong in my mind to the effect that cerebral action is capable of overcoming the inhibitory forces which are at work upon the perceptive centres in these cases. In fact, when I repeated subsequently the experiment last mentioned, the first touch of the pin was felt, but that was all: else how explain the fact that the garter around the limb, the shoe, the pressure of the bed. have not the same effect as the bandage

applied by the experimenter?

The centripetal channels are undoubtedly more diffuse than the centrifugal, and it is very probable that the powerful influences which may overcome an interruption to centrifugal nerve-forces (motor paralysis) are not needed for the overcoming of obstacles to the centripetal, or for the neutralization of inhibitory influences. But in the majority of these cases the influence of the will does not seem to be sufficient. It must be aided by some stimulation of the peripheral ends of the This is brought about by the different applications to the skin. periments of others show that undoubtedly the electric currents produced by the application of certain metals are most apt to do this. In fact, it seems that they may do so without the intervention of any central stimulus. The increased functional activity of the perceptive centres, brought about by cerebral action and by the stimulation of the peripheral nerves, will do for this diseased nervous apparatus what emotions will do in a perfectly healthy individual. They will develop, for instance, a motor power not present under ordinary circumstances; or, to make the simile more like, it is something akin to the abnormal sensations, the pain, that may be started in any part of the body by fixation of attention. In hysteria there is an arrest of cerebral action, says Dr. Wilks. In this line of thought is probably to be found the explanation of these phenomena. Very profitable reading will be found in an article by Dr. Wilks on cerebritis, hysteria, and bulbar paralysis, as illustrative of arrest of function of the cerebro-spinal axis, in Guy's Hospital Reports, vol. xii., 1878.

#### VEGETATIONS OF THE ENDOME-TRIUM.

BY J. E. GARRETSON, M.D.

SUGGESTED by Prof. Goodell's able and very interesting paper published in your journal of the 18th of January, I beg to offer a paragraph presenting the claims of what is commonly known as "London paste" to substitute both the sharp and dull curette in a class of operations referred to by the distinguished gynæcologist.

The cutting off of uterine vegetations by an act of mechanical excision is a process which can have found in it the minimum only of alterative effect; it may have found in it the maximum truly of hemorrhagic Endometric vegetations, to be accident. gotten rid of permanently, demand basial It is not enough, so to obliteration. speak, to cut away branchlets and branches. leaving rootlets and roots. The exigencies of such cases point to a therapeutic

grubbing-hoe.

Having for many years employed with satisfactory success, in a variety of directions, the combination widely familiar under the name of "London paste," and having observed that the employment of this paste is never attended by what is ordinarily understood as inflammation, I was led to have recourse to it as a destructive of the benign vegetations of the uterus. The result in most cases in which I have so used it has been profitable to the patients to an extent that leads me to direct attention to the agent with a large share of confidence.

London paste, introduced to the notice of the profession by Dr. Morell Mackenzie, of England, consists of equal parts of caustic soda and quicklime made into a semi-fluid by admixture with absolute alco-In ordering the ingredients for this paste from the druggist, the soda and lime are to be mixed, great care being taken, in stopping the bottle in which the powder is placed, to prevent the possibility of deliquescence, the material in a moist state being worthless. The paste is always to be made at the moment of use.

To employ "London paste" for the destruction of vegetations of the endometrium, demands the preliminary step of enlarging the os and neck through the use of sponge tents. A plan commonly found satisfactory is to introduce a tent of large size the day before the proposed operation, the sponge being retained in situ by a plug of absorbing cotton; the patient

remaining, of course, in bed.

To apply the paste,—the inside of the uterus being fully exposed,—the cauterant is carried to the spot to be acted on by means of a spoon-cupped director; or, if the surface at large be studded, it answers every purpose to twist about the neck and bulb of the Simpson sound a tuft of absorbing cotton, and, after saturating this with the paste, smear the parts generally. The application may be repeated, if found necessary, once, twice, or even thrice in a

While peculiarly curative of benign vegetations, "London paste" is the worst possible application to granulations of cancerous character: accuracy in diagnosis is all-important in employment of the means.

As might be inferred, the use of "London paste" in the uterus is attended with a discharge, which continues for a number of days; it may be so many as twenty or thirty. The result, however, is commonly a solid and permanent contraction of the viscus, together with restoration of office.

An assuring familiarity with the action of "London paste" is gained by using it on the common seed-wart. An application made to such a wart is found to act with a rapidity which allows the body to be scraped away in one or two minutes.

Somewhat analogous to the puzzling cases of uterine vegetations instanced by Prof. Goodell are the epulic fungi met with occasionally in the mouths of pregnant women. I have seen a growth of this kind rise from the gingival margin and half fill the mouth with its proliferations before the end of a term; yet, utero-gestation accomplished, the condition has disappeared, leaving no sign. In these cases the affected gum, like the "cervix uteri," is "large and flabby," bleeding is easily provoked, and constant oversight on the part of the surgeon is necessary to the comfort, if not indeed to the safety, of the patient.

#### THE ACTION OF BRUCIA ON THE MOTOR NERVES.

BY ROBERT P. ROBINS, B.A.

IN the October number of the Journal of Nervous and Mental Disease, Dr. Wm. H. Klapp, of this city, advances the theory that strychnia, given even in toxic doses, fails to affect the motor nerves.\* This theory, which is in opposition to the views of other experimenters with this drug, is substantiated by Dr. Klapp in

<sup>\*</sup> On the Anatomical and Physiological Effects of Strychnia on the Brain, Spinal Cord, and Nerves. By W. H. Klapp, M.D., Philadelphia.

a series of thirty-seven experiments on dogs, cats, frogs, etc., he in every case failing to find that the drug destroyed neurility. To account for this difference in the results obtained by Dr. Klapp from those previously reported, it is suggested that probably in the latter cases the strychnia solutions used were tainted with brucia, the fellow-alkaloid. Dr. Klapp's solution of strychnia, prepared by Messrs. Powers & Weightman, was submitted to the usual tests, and was found to be absolutely pure, and thus the possibility of mistake was reduced to a minimum.

Acting on the suggestion of Dr. Klapp, I instituted a series of fifteen experiments with brucia, and have obtained results highly satisfactory in the corroboration of the theory which he there advanced. These experiments with brucia were performed as nearly as possible under the same auspices as were those with strychnia: the solutions were of the same strength, the same apparatus was used, and the same parts were chosen for experimentation. The following is a detailed account of

the investigations.

The animals used in the experimentation were ten frogs, three rabbits, and two dogs. The solution was prepared as follows. each cubic centimetre of distilled water there was dissolved one-hundredth of a gramme of brucia, and the solution was neutralized with a drop of acetic acid. The Grove cell, 80 millimetres high and 50 millimetres in diameter, and the Dubois-Reymond induction apparatus (with Helmholtz's modifications), as used by Dr. Klapp, were employed for the purpose of irritating the nerves. The following detailed accounts of a few of the experiments will serve to show the action of the drug; the other experiments verify the results as stated below.

Exp. II.—Frog; weight, 23 grammes. At 1.30 P.M. I cubic centimetre of the solution was injected under the skin of the lower jaw. At 1.31.5, general tetanic convulsion; at 1.32.5, emprosthotonos; and at 1.40.2, dead. At 2.10.1 the left sciatic nerve was irritated, but gave no response with the highest power of the battery.

Exp. III.—Frog; weight, 26 grammes. At 2.18 P.M., ½ cubic centimetre of the solution was injected into the lungs; at 2.20, general tetanic convulsions, prolonged until 2.25; at 2.25.50, dead. At 2.30, right sciatic was irritated with full coil strength, but gave no response. Right and left sciatics were tested

alternately, at intervals of five minutes, until 3.10, without eliciting any response.

*Exp. VII.*—Rabbit; weight, 3 pounds. At 1.20,  $\frac{1}{2}$  cubic centimetre of the brucia solution was injected. At 1.26.5, strong tetanic convulsions, with great dilatation of the pupil: at 1.20.6, cessation of convulsions, which occurred again at 1.30.16, induced by touching, and lasted until 1.31.3, when the tetanus relaxed and the animal was found to be dead. At 1.40 the left and right sciatic nerves were bared and tested with battery at O, alternately, until 2.10, without response, while muscular response was elicited at each application.

Exp. X.—Dog; weight, 28 pounds. At 2.14, 3 cubic centimetre of the solution injected. At 2.16.30, uneasiness, whining, pupils much dilated; at 2.10, strong convulsions, great injection of the conjunctivæ; at 2.21, cessation of convulsions, stiffening of body, slight twitching of facial muscles, voiding of urine and fæces, marked and continued nystagmus; at 2.28.30, cessation of the convulsions, twitching of the facial muscles, and peculiar snapping of jaws; at 2.55, cessation of respiration, and at 2.56, cessation of heart's action; 3.10.5, battery at O applied to gluteal muscles gives satisfactory response, but none obtained from right or left sciatic; and at 3.14 and 3.18 reapplied with same results. (Post-mortem examination showed great congestion of the brain, heart stopped in diastole, with both ventricles full of liquid blood.)

 $Exp. \dot{X}V.$ —Rabbit; weight,  $2\frac{1}{2}$  pounds. At 10.54, \(\frac{3}{4}\) cubic centimetre of the solution was injected. At 10.55, uneasiness and convulsive facial movements; at 10.56, tetanic convulsions of great violence, followed by death at 10.59. At 11.06, 11.10, and 11.15, the battery was applied to right and left sciatic nerves and gluteal muscles, with responses from the

latter, but none from the former.

These experiments cited in extenso, together with the others, which gave the same relative results, seem to corroborate Dr. Klapp's theory on the subject, and would appear to afford an explanation as to why the experiments which he quotes in his paper should differ from those of other investigators with strychnia.

#### A CASE OF MASTOID DISEASE.

BY CHAS. P. KNAPP, M.D.,

Wyoming, Pa. MRS. L., æt. 23, American, wife of a

miner, one child, nursing, consulted me on June 18, 1878, on account of severe pain in right ear, with some slight discharge. The patient's appearance was cachectic. The only history, more or less earache since September, 1877.

I washed out the ear with carbolized water; passed speculum easily. The membrana tympani appeared somewhat "flabby," and upon the patient holding her nose and mouth and inflating the middle ear, air bubbled through a small opening in the membrane. Watch could be heard placed over the ear. Ordered blister over mastoid, and bromide of potassium and chloral for pain.

Patient did not call again until July 4,

Patient did not call again until July 4, when there was a profuse discharge of greenish-white pus from ear; mastoid swollen, red, and very sensitive; pain intense; hearing abolished on that side. Mastoid disease diagnosticated. Operation recommended.

July 5 .- Assisted by Dr. Guthrie, of Wilkesbarre, and Mr. Hutchins, my student, the patient being thoroughly etherized, I cut down upon the mastoid process, beginning the incision about an inch above the external meatus and carrying it to the termination of the process below, avoiding the occipital and posterior auricular arteries by cutting between and parallel to them. The tissues were swollen and "boggy," and fully an inch in thickness over the process. When I struck the bone, a dessertspoonful (f3ij) of pus welled up. Inserting my finger in the cut, I found the bone bare of periosteum, and broke through a shell of bone, from which a teaspoonful of pus escaped, and then with a bone elevator I opened a cavity into which I could insert my littlefinger tip. The bone was ulcerated, soft, and easily scraped away with the finger-nail. wound was kept open, and a poultice applied over it and the ear. Patient recovered well from ether, and was free from pain. wound and ear syringed daily with carbolized water and poulticed; discharge copious; some pain at night; tonic treatment.

July 25.—Patient walked about three miles

in hot sun.

July 26.—Mastoid swelling returned; discharge ceased; intense pain; partial paralysis

of seventh pair nerves, that side.

July 29.—Enlarged former opening, and removed bone, making a sulcus in the process over an inch long and nearly half an inch wide and deep. Patient recovered well. Same treatment as before.

July 30.—Discharge re-established; pain relieved, also paralysis; patient improving

daily

August 6.—Called at night. Pain intense, and patient somewhat delirious. Introduced speculum; enlarged opening in membrana tympani with tenotomy knife; ordered mustard foot-bath; large poultice over that side of head; gave morphia gr. ½.

August 7.—Patient much better; reported hemorrhage from ear during night. From

this time she constantly improved.

November 27.—Patient called at my office. Wound healed; no discharge from ear, and no further trouble of any kind; to all appearances perfectly well; watch heard eight inches

from that ear. Treatment, other than surgical, tinct. ferri chl., mxx ter in die; syr. hypophosph. comp., f3ss ter in die; morphia, by the mouth, to control pain; lager beer and good food. The child was weaned early in the case, at my advice. The condition of the patient was such as to give poor hope of a successful termination.

## ERYSIPELAS COMPLICATING RHUS TOXICODENDRON POISONING.

BY P. G. SKILLERN, M.D.

M. c., æt. 84, native of New England, nourished for one of his years; enjoys full possession of all his faculties. Previous history remarkably clear from disease. Having been summoned in great haste to him on the afternoon of December 20, his upper eyelid was found to be considerably swollen and painful. Upon inquiry, it was found to have commenced suddenly with a prolonged chill but a few hours previously; temperature 101°, pulse 94. Treatment, rest, quinia, and a lotion of lead-water and laudanum.

December 21.—Inflammation extended to lower eyelid; the tissues around the eye were now greatly swollen and very sensitive to the least manipulation, and when viewed from above and compared with the sound side were found to project fully half an inch. He was unable to open his eyes; complained of slight headache, anorexia, and constipation; temperature 100°, pulse 85. Ordered laxative pills and liq. ferri. chlor.; quinia and lotion to

be continued.

December 22.—No abatement of symptoms; swelling spreading rapidly all over side of face and down upon neck, accompanied with small vesicles; eyelids discharging an ichorous fluid from two small openings. He was fast becoming debilitated. Recognizing the affection, which was at first obscure, to be one of oak poisoning, a solution of hyposulphate of sodium was at once ordered.

December 23.—Inflammation mostly subsided, and the parts beginning to scale, with the exception of the eye, which was even more swollen, projecting at least an inch, and

suppurating profusely.

December 24.—A small erysipelatous patch was now observed on the forehead between the eyebrows, causing him severe headache, burning, stinging pain, and much restlessness. Large doses of iron and quinia were now ordered, with meat-broths and brandy.

December 25.—Erysipelas extending over head; no perturbation of mind; lids still suppurating. Remained in this condition until December 31, when a slight improvement was noticeable, the erysipelatous inflammation beginning to subside, together with the swelling around the eye; an abscess appeared

on the temporal surface of the frontal bone, which was exceedingly painful and annoying.

January 1.—Erysipelas declining. Opened abscess which afforded much relief

abscess, which afforded much relief.

January 3.—Erysipelas and swelling disap-

pearing rapidly.

January 5.—Erysipelas entirely gone; swelling of lids almost subsided; has comparatively little pain; no headache; pulse strong, regular, and normal; appetite improving; sits up

for several hours at a time.

January 7.—Eyelids still continue to discharge. On examination, the tissues were found to have undergone a considerable undermining by the recent inflammation. Knowing the discharge would continue as long as the walls of the abscess remained, stimulating injections and pressure were resorted to. He has since made a good recovery, being able once more to resume his usual vocation.

Remarks.—This case is remarkable, first, for the non-existence of any brain-complication, considering the extensiveness of the disease; secondly, for the non-complication of the eyeball with so great an inflammatory action in such proximity; and, lastly, for the wonderful amount of vital force evinced by one of such an advanced age.

#### TRANSLATIONS.

THERAPEUTIC USES OF THE BROMIDES.

—Rosenthal, in an article (Wien. Med. Presse, 1878, No. 46) on therapeutics,

speaks thus of the bromides:

Bromide of potassium, on account of the adynamia of the heart which it sometimes causes, must frequently be suspended. In addition to weakness, retardation, and irregularity of cardiac action, the bromide of potassium, in large and long-continued doses, may give rise to præcordial pain and mental disturbance. Bromide of potassium, although it occasionally improves the appetite to a marked degree, yet more frequently disturbs digestion when this is not originally strong. In such cases it should be taken at meal-times, or after draughts of milk, which preserves the stomach from irritation. Bromide of sodium is a milder preparation, more easily borne by the stomach: it is therefore preferable in the case of nervous women, of old people, and of children, since it has a salty taste, not in itself unwelcome to children. Rosenthal mixes the powdered bromide of sodium to the amount of ½ to I gramme (7½ to 15 grains) with breadcrumb, and thus smuggles it in, so to speak, as part of the food. He employs it in various nervous affections, as convulsions, laryngismus, nightmare, and disturbed sleep, giving it once or more daily. The chief objection to the bromide of sodium is its too ready deliquescence. Where enough cannot be given in the form of small pills, it may be given in powders, making up only enough for one or two days, or in solution with syrup.

Bromide of ammonium is a more stable preparation. It has a salty ammoniacal taste in solution, which may be disguised by syrup of orange-peel. Rosenthal has given it in doses of 6 to 8 grammes (3ss to 3ii) daily, for months at a time, without mishap. It acts well in epilepsy, whooping-cough, spasm of the glottis, and spastic laryngismus (in children as well as in hysterical persons), but no better than the other bromides. Brominated camphor, as appears from researches upon animals, affects the heart's action, the respiration, and the temperature, reducing them. Its formula is C<sub>10</sub>H<sub>15</sub>BrO, and it occurs in white crystals. It is not to be confounded with Laurent's "bromkampher," which occurs in red rhombic crystals and the formula of which is C<sub>10</sub>H<sub>16</sub>Br<sub>2</sub>O. It is useful in the milder forms of epilepsy and in alcoholic trembling; but Rosenthal does not consider it equal to the bromides of potassium and sodium. As an antidote to strychnia it has proved valuable given in doses of 1 to 2 grammes (15 to 30 grains) twice or thrice, repeated at short intervals. In nervous palpitation of the heart, Rosenthal has given brominated camphor in the dose of .2 to .3 decigramme (3 to 41/2 grains) several times a day in cachets du pain. According to Berger, this salt is useful in sexual excitement and pollutions, but it fails in the more stubborn cases, where bromide of potassium, with opium, or tinct. verat. viridis (two or three drops on sugar until slowing of the pulse is attained), acts much more satisfactorily. In the case of a patient ordered small doses of brominated camphor on account of genital excitement, who took on his own responsibility I gramme (15 grains) at a dose, Rosenthal observed symptoms of weight and pressure in the head, shortness of breath, slowing of the pulse to sixty beats, weakness of the limbs, and mental disturbance to a marked degree, together

Some ether upon with fear of death. sugar was administered, and later strong coffee, which soon dissipated the alarming symptoms. Rosenthal regards brominated camphor as particularly useful in irritation of the bladder. Both in that form due to taking cold and in that caused by the forcible retention of the urinary secretion, brominated camphor in the dose of .2 to .4 decigramme (3 to 6 grains) thrice daily quickly abated the annoying difficulty in urinating. In such cases it must be continued for some time. Sensitive persons experience fulness of the head (probably due to the action of the bromine); but this feeling leaves after a few doses. Longcontinued use of brominated camphor sometimes causes derangement of the stomach, requiring suspension of the remedy. Bromide of zinc can be prescribed only in pill form or in solution, on account of its deliquescent properties. It is given at first in the dose of .1 decigramme (11/2) grains) several times daily, and is gradually increased to .4 decigramme (6 grains). It is particularly useful in hysterical muscular spasm. Rosenthal does not consider this preparation superior to the bromide of potassium.

Hydrobromate of quinine is easily soluble in alcohol, but in water only in the proportion of 1 to 18, even when heated. dissolves, however, in hot glycerin quite easily (1 to 4), and the solution remains clear for months. This can be diluted with water for hypodermic injection, until a syringeful contains only .1 decigramme (1½ grains) of the quinine salt. thal has used this with very good effect in a case of hysterical vomiting when opium had failed, the vomiting ceasing entirely after two or three days. Hydrobromate of quinine is also useful in the dose of  $\frac{1}{2}$ gramme (7½ grains) a day in general nervousness, in circumscribed headache, and in muscular cramp. Though recommended by Erlenmeyer in the painful paroxysms of locomotor ataxia, Rosenthal has found this preparation not to be depended upon.

EXCISION OF THE INITIAL LESION OF SYPHILIS.—Dr. Th. Kölliker, in a lecture recently published in the *Centralblatt für Chirurgie* (No. 48, 1878), says that if we accept the dualistic view, and regard the initial lesion, so called, as in reality the earliest *secondary* or *constitutional* symptom, it would be useless to attempt to excise

this. Within the past few years, also, this experiment has, in fact, been tried by Hüter, P. Vogt, Coulson, Thiry, and others, with almost invariably unfavorable result. The scar, or even the surface of the wound, became indurated, and the symptoms of constitutional syphilis appeared and followed their usual course. For this reason, such authorities as Sigmund, Lewin, and Zeissl regard excision as entirely useless. Auspitz more recently undertook extirpation in thirty-three cases in which swelling of the inguinal glands had already been observed. Of these, setting aside ten cases not long enough under observation, fourteen remained quite free of subsequent syphilis, while in six the disease ran a very mild course. Out of twentythree, therefore, fourteen were quite cured by excision of the initial lesion. Inspirited by these results, Kölliker followed with eight cases. In these cases the excision was practised on the seventh, ninth, tenth, twice on the fourteenth day, and once each after three and seven weeks from the appearance of the sore. (In one case no note was made of the date of the lesion.) the time of the excision, glandular enlargement was present in four cases, none of which, however, showed subsequent symptoms of general infection. Five of Kölliker's cases of excision were followed by constitutional symptoms, while three escaped. His conclusions are as follows: 1. In certain cases, which at present cannot be designated with certainty, extirpation of the primary sore serves to prevent general contagion. 2. This may occur even when the glands in the neighborhood are indurated. 3. On the other hand, extirpation is often fruitless, no matter how early undertaken. 4. Even where excision does not prevent the occurrence of general symptoms, it modifies them and makes the course of the disease milder. Kölliker concludes his lecture by subscribing to Auspitz's assertion that the initial indurated sore is not to be taken as a symptom of consummated general infection.

THE PART PLAYED BY BATHS IN DISEASES OF THE SKIN.—Dr. A. Carry, whose brochure on baths has recently been reviewed in *Le Progrès Méd*. (No. 47, 1878, p. 903), considers baths under the heads (1) of their action upon the healthy skin and (2) upon the diseased skin. His conclusions are as follows. In the therapeutics of cutaneous disease baths enjoy a factitious

prominence, which causes them to be employed indiscriminately in almost every variety of skin affection. This prominence is partly due to the enterprise of the physicians in charge of various mineral springs. In reality, baths are useful only in a few diseases of the skin, and even in these their action is never, strictly speaking, curative. In affections due to external causes baths serve chiefly to soften and mollify the skin; in animal parasitic diseases they may destroy the parasite; in vegetable parasitic diseases they have little effect. In affections due to internal causes. syphilis, scrofula, etc., baths, by their tonic and stimulant effect, are valuable as an adjuvant to the general treatment. In the dry form of skin disease the bath is useful as a hygienic measure; in the moist forms it is almost always injurious.

SOME NEW PREPARATIONS OF QUININE. -Rosenthal (Wien. Med. Presse, 1878. No. 46) says of the hydriodate of quinine that he has found it useful in the dose of .I to .3 decigramme (11/2 to 41/2 grains) several times a day, in the more recent forms of rheumatism of the face. It has recently been vaunted as a febrifuge, and in the dose of 4 to 8 grammes (3i-3ii) is said to reduce even stubborn (?) fever. Arseniate of quinine is recommended by Rosenthal in intermittent fever, puerperal fever, and also in chronic skin diseases (the latter a wide range.—TRANS.). The appropriate dose is .or to .o2 centigramme (1/6 to 1/3 grain) twice or thrice daily in pill form. In typical facial neuralgia of limited extent, Rosenthal saw rapid relief follow, in two cases, the use of increasing doses of this salt. Salicylate of quinine, recently described by Jobst, is a white powder, with a rather bitter taste, easily soluble in ether, but only slightly so in water (1 to 225). In several cases of facial erysipelas and typhoid fever, Rosenthal gave this salt in doses of 1/2 gramme (71/2 grains) and more daily, with the result of materially reducing the fever and quieting the patient. In cases of puerperal fever, and also of the severer forms of necrotic diphtheritis accompanied by typhoid symptoms, the use of salicylate of quinine is to be recommended.

METHOD OF STOPPING THE PAIN CAUSED BY CAUTERIZING THE CONJUNCTIVA WITH SULPHATE OF COPPER.—Karl Pich (Wien. Med. Presse, No. 48, 1878; from Cbl. f. Med.) alludes to the severe and long-con-

tinued pain aroused by the employment of sulphate of copper in diseases of the conjunctiva. When this has to be used frequently and for long periods of time, as in conjunctivitis blennorrhoica, the pain is a serious objection. Pich suggests that, after using the smoothly-fashioned crystal of blue-stone, four or five minutes should be suffered to elapse, and then powdered calomel should be insufflated against the The pain, he says, immediately ceases. After having followed this plan for five or six days, the calomel may be employed directly after cauterizing; the pain is at once completely relieved. Whether the calomel acts mechanically or chemically, Pich is unable to say.

BROMIDE OF ETHYL IN NEURALGIA AND SLEEPLESSNESS. - Winckel and Fiedler (Wien. Med. Presse, No. 48, 1878; from Allg. Med. Cent. Ztg.) say that this preparation, the properties of which are similar to those of chloride of ethyl, was first used in France in cases of carcinoma with neuralgia and sleeplessness. Dr. Winckel observed good results from its use in the neuralgia of myoma and beginning epithelioma. The hypnotic effect was unmis-The dose of bromide of ethyl is takable. 10 to 15 to 20 drops in water before going to bed. It is easily taken. Dr. Fiedler adds that he has used this substance in eight cases of marked insomnia, having given it in the doses just mentioned. Two of the patients who had long suffered from sleeplessness slept well afterwards. The number is, of course, too small, excepting as it seems to invite further trial of the remedy.

ACIDUM COPAIVICUM. - Géza Lucich, apothecary and professor in Presburg, claims to have isolated copaivic acid and to have made a copaivate of sodium. acid occurs in prismatic crystals, which soon lose their transparency when exposed to the air. Lucich has also made pills of copaivate of sodium, mixing two parts of the product with one of dextrine and making the mixture into pills with mucilage. Each of these pills contains 2 grammes (30 grains) of the copaivate of sodium, which is equivalent to 6 grammes of copaiba resin. Prof. Wittstein has examined this preparation chemically, and thinks highly of it. Some hints as to its manufacture are given. — Wien. Med. Presse, No. 48, 1878; from Allg. Med. Cent. Zeitung. X.

# PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, FEBRUARY 15, 1879.

#### LEADING ARTICLES.

THE HOT BATH AS A RESTORATIVE.

THERE is one remedy whose employment in medicine is almost as old as is the human race, but which yet seems to us to have an important use not generally practised. We refer to the hot bath. As sudorifics hot baths are sufficiently in vogue, but their employment as restoratives is not

so universally recognized.

The phenomena of death from cold show that a lack of caloric in the body is no less paralyzant of animal functions than is an excess of the same force. Evidently the organism was constructed to run upon a certain plane of heat, and cannot vary from this without serious results. numerous experiments upon animals, in the laboratory of Prof. Wood, in the University of Pennsylvania, it has been proven that in a cool apartment death rapidly results after section of the spinal cord, from falling of the bodily temperature, the animal which in a warm room will live indefinitely dying very shortly in a tem-perature of 50° Fahr. The cause of the inability of the animal to resist external cold after section of the cord is undoubtedly vaso-motor paralysis. Normally, the temperature of the interior of the body is maintained by keeping an outer layer of partially-cooled tissue between the internal organs and tissues and the outer air. When, however, the power of contracting the superficial vessels has been lost, the organism can no longer maintain this protecting layer, the surface-temperature rises, heat is rapidly lost, and soon the whole body becomes uniformly cooled.

Vaso-motor paralysis is produced by toxic doses of various remedies, and under these circumstances artificial maintenance of the bodily temperature is imperative, forming a most important portion of the treatment of all such *poisoning*. *Collapse* from any cause is largely dependent upon, or, more correctly speaking, largely is, vaso-motor palsy: hence in almost all

forms of collapse the use of external heat is of great importance.

Dr. Charles Hunter, of this city, has very successfully applied this treatment to that form of collapse which follows injuries and surgical operations and is known by surgeons as shock. The lack of power of alcoholic and other ordinary stimulants in this condition is proverbial. The pathological state is undoubtedly vaso-motor palsy, the bodily temperature is much below normal, and the rational treatment consists in the hypodermic use of atropia and digitalis and the external employment of the hot bath. This plan of treatment will probably be found to be a very important addition to surgical therapeutics. In the first days of post-fœtal life the power of resisting external cold is very slight, and in many cases of still-born children, or of children whose vital powers are almost extinguished at birth, life may be saved by a high external temperature, the little waif being kept in an air of 90° to 100° Fahr., and from the influence of cold walls which shall draw off, as it were, the little store of heat provided by nature; for there is no doubt that radiation is greatly affected by the temperature of surrounding objects.

It is hardly necessary to dwell in more detail upon the various forms of collapse. Enough has been said to illustrate the principle that whenever the bodily temperature falls below normal, pyretic treatment is demanded. The vigor of the treatment should always be in direct proportion to the suddenness and extent of the fall of

temperature.

In regard to the methods of applying heat, it must, in the first place, be understood that wrapping in blankets, etc., are only useful as a means of preventing cooling of the body; that when the animal temperature has already fallen they will not suffice at all. The same may be said of air heated to temperatures which can be readily obtained or can be borne by the attendants. Radiated heat is somewhat better, and often the use of a brisk open fire is of service. The hot bath is, however, the only pyretic remedy which can be relied on, when a Turkish bath is not at hand. It should always be a full bath, in as warm a room as can be procured, and should be at a temperature of about 103° Fahr., when the patient is put into it. The duration of the bath must vary with the circumstances of the case. Frequently, ten minutes will be long enough, but if the mouth-temperature does not rise to normal, a much longer tarriance may be advised. During the bath the heat of the water should steadily be increased as fast as it can be borne, if the patient be conscious. It will be found that IIo° is about the limit of endurance for most persons; and in unconscious subjects this limit should not be passed.

#### CORRESPONDENCE.

#### LONDON LETTER.

HERE is not much of interest going on in the medical world here, as the receipts this Christmas, except with a very small number, have fallen far below the usual amount, and the Anglo-Saxon is chiefly impressionable on his pecuniary aspect. Christmas, with its festivities, is over, and now the bills have to be faced, and economy is the rule of the day in doctors' houses as well as elsewhere. One piece of medical news there is, and it is this: that Sir William Jenner has relinquished his connection with University College Hospital, where for so long he has been a respected teacher. Sir William Jenner is a man who does honor to his profession, and whom the profession delights to honor. Straightforward, honest, abrupt, single-minded, without wile, he is trusted by every one, from her Majesty downwards. As a clinical teacher he is almost unrivalled, and the best evidence of his teaching power is shown by the reverent spirit in which his old pupils repeat his maxims.

Jenner's pupils seem never to forget his teaching,—very fortunately for them. Diagnosis is Jenner's great forte. He has a clear, discriminating intellect, at once penetrative and reflective. He recognizes minute points, and, further, appraises them correctly. The distinction between typhoid fever and typhus had been largely made out by A. P. Stewart and others before Jenner came to it; but he placed the matter beyond all doubt; and where he put it it remains. Work-honest, sound, genuine work—is the foundation on which Jenner's reputation is based. No adventitious aid has he had from an easy address or an insinuating manner. He is abrupt to a degree slightly trying,—to put it mildly,—and has none of the air of a courtier. Familiar with royalty, he does not in the least look like one's ideal of a queen's physician, which is just what Dr. Wilson Fox, who is Physician Extraordinary to the Queen, looks to the life. But his manner is impressive, and such as to gain the confidence—I may say the undivided confidence—of those who consult him. Now at the top of the ladder, he had hard

work to mount the first rung. Pure merit gained him the professorship of Medicine at University College Hospital, where for long he remained, respected, but still a poor man. By a railway accident Dr. Bailey, the court physician, was killed suddenly in the prime of life. Such an event being quite unforeseen, the question of who should succeed him was an open one. The verdict of the profession was almost unanimously in favor of Jenner. His star was now in the ascendant. Not long had he been the court physician when the Prince Consort was seized with typhoid fever. Every one knew-the court and the profession alike—that Jenner was the right man in the right place, and though the Prince died, still the public confidence in Jenner was strengthened and confirmed by his manage-ment of the case. Ten years later the Prince of Wales was stricken down by the same malady which had proved fatal to his father. This time Jenner's skill and assiduity were rewarded by a more fortunate result: perhaps a more youthful constitution was not without influence over the result. Since then Jenner has had a large practice and been a busy man. Once more, in December last, Jenner stood by the bedside of one of the royal house of England, the ill-fated Princess Alice of Hesse-Darmstadt. By a curious coincidence, again the disease was one with which Jenner's name was linked. In 1860 he wrote on diphtheria, the malady under which the Princess labored. But this time his skill was again in vain. The 14th of December was fatal to her, as it was to her father, whose devoted nurse she was seventeen years Thus it will be seen that Sir William Jenner has been associated with the royal family of England in some of the most eventful and painful episodes in the history of this generation of it. But, whatever the result, fortunate or deplorable, Jenner's skill and vigilance have never been questioned for a moment.

The demands of a large and lucrative practice have at last compelled Jenner to dissolve his connection with his old school, where his well-known figure will be seen no longer. But pleasant reminiscences of him will linger long about his old haunts, and stories will be told of him when his honored head is laid low,may that be far distant! is the fervent wish of all,—stories of his own hard struggles in his early days, stories of his keen sympathies with the struggles of other men, and of his readiness to help them. Like other men of fine fibre, his own hardships make him more susceptible as to the difficulties of others, and the friendly help which lifted many a man out of the slough of despair is known to have come from Jenner. Counsel and guidance was he ever ready to give to the hard-work-ing, hard-up student. Material aid after the student days were over has he given to many. Many of the men who now are winning fame

for themselves owe their chances of success to Jenner. Unostentatious by nature, he did good by stealth; and the warmth with which many of his old pupils speak of him is due as much to gratitude to him as to well-founded admiration.

As an instance of his perfect abandon and absorption in his work, the following story is told. Entering the pathological room one day, he remarked how few students were present, when his house-physician explained that it was "Derby Day," the day of the national race. "Derby Day, sir!" said Jenner, with unconcealed surprise: "when I was a student, I knew as little when it was Derby Day as when it was Trinity Sunday." Jenner's mind was evidently not cast in a devotional mould.

Jenner is rather a clinical teacher and a diagnostician than a therapeutist; but he is no unbeliever in remedies, and his treatment is ever sound and judicious. As an evidence of his very acute, indeed minute, observation may be adduced his article on "Rickets" in the System of Medicine. The sketch of a rickety child is simply perfection; yet this is not due to any especially attractive literary power, but rather to the exceeding keenness of the observation. In all Jenner's writings good, clear common sense is conspicuous, and his articles are well worth reading and studying. Unfortunately, they are not gathered together, but are scattered about. His pupils, who have had the advantage of his systematic lectures, have a great advantage over those who have to search for his articles and then only get fragmentary scraps of his well-garnered information. Jenner is the recognized head of the profession in England, and well deserves the post. One thing only is there against him, and on this opinions may differ. The junior men hold that, with Sir William Jenner's recognized ability and extended experience, he ought to charge larger fees than he does. That he does not do so is probably due to his unselfishness and sympathy with his patients: still, if he will continue to give his advice for a guinea, the prospect is not brilliant of other and junior men getting

That his resignation of his post at University College Hospital is a loss to the school cannot be questioned for a moment; but he leaves behind him some strong juniors, who will uphold the fame of the Hospital school. Sidney Ringer, whose "Handbook of Therapeutics" is known wherever English-speaking doctors are found, takes the chair of Medicine, while Fred. Roberts, whose "Principles and Practice of Medicine" is now the recognized text-book at all medical schools, ascends the chair of Materia Medica, where his acute mind and clear reasoning-powers will maintain the reputation given to the chair by his immediate predecessor. In spite of the wealth of the old-established

schools, St. Bartholomew's, Guy's, and St. Thomas's, poverty-stricken University College Hospital, with its one hundred and thirtysix beds.—scarcely more than the number belonging to one surgeon at the largest hospitals,—maintains its place as the premier teaching hospital in London. It is not the number of beds which makes a reputation. Skoda only had one ward of twelve beds in Vienna, but the world listened respectfully to what was spoken from that ward, more attentively than to the utterances from twenty large hospitals all put together. So from this little hospital in Gower Street goes forth teaching which will and can hold its own against all comers. With such a list of names as Russell Revnolds, Charlton Bastian, Henry Maudsley, Graily Hewitt, Burdon Sanderson, Tilbury Fox, John Marshall, Christopher Heath, Berkeley Hill, Ray Lankester, and others who will in time earn equally famous reputagrowing. There is no threatening senile decay, no looming falling-off,—which is not the invariable rule in the London hospitals at present.

The subject of "The Premurmuric Stage of Aortic Valvulitis" was discussed recently at the Harveian Society. The paper was read by the present writer, who took up the position that in the present state of our knowledge it is not always necessary to wait for the presence of a murmur before deciding that mischief is afoot in the aortic valve-cusps. As regards the origin and the causal associations of aortic valvulitis, we now know so much that we can tell with fair certainty that the aortic valves are becoming implicated before the stage of a murmur is reached. Putting aside the comparatively rare cases, chiefly females, where the aortic valves are implicated in the inflammatory endocardial complications of acute rheumatism, the causal associations of aortic valvulitis are two,—(1) effort and (2) chronic Bright's disease. Aortic valvular disease is common amidst strikers, that is, men who wield "the big hammer" in iron industries. The efforts of these men are severe during the time the iron is hot on the anvil. In order to deliver more determinate blows, they have to posture, involving setting all the muscles of the lower limbs and back into action. Thus, when the blow is delivered, the muscles of the whole body, not even excepting the muscles of expression, are put into contraction simultaneously; and at the end of each "heat" the striker's heart beats violently and with much excitement. The demand upon the heart has been great, and its contractions are energetic. Scarcely has the condition of the circulation quieted down, when another "heat" calls upon the striker for active efforts.

Aortic valvular disease is not, however, the first modification of the vascular system produced by sustained violent efforts. Enlarge-

ment of the heart, hypertrophy, is the first change. Where the heart is unequal to this nutritive change, and palpitation comes on, the striker applies to the physician. If he be counselled to leave his occupation, and take the advice, no further heart-mischief follows; but if he determine to continue his occupation, then digitalis and iron will usually enable the heart to develop the requisite hypertrophy, and the case progresses as do those where no warning palpitation has told that modifications of normal processes are initiated.

Many of the muscles of the limbs cross the arteries and compress them in contraction. In certain carnivora the femoral artery has a ring of bone thrown out from the femur in order to keep off the pressure of the muscles when firmly contracted. In general muscular contraction the flow of the blood is impeded, and the large arteries and the aorta are filled with blood, and the blood-pressure in them is high. The opposition offered to the outflow of the blood on the ventricular systole results in hypertrophy of the left ventricle. The blood is now driven into the aorta with abnormal force, the arterial system is forcibly distended, and the rebound of the elastic vessels is in strict proportion to their distention. The consequence is that the aortic valves are closed with undue force, and inflammation, slow and gradual, is set up. The forcible closure causes the valve-cusps to be driven together violently, and accentuation of the aortic second sound follows. This is the first indication of approaching change. Sooner or later, according to the irritability of the tissues in different persons, a murmur is produced, telling of insufficiency of the aortic cusps. But when a murmur is produced, the disease has made much progress, and much mischief has been done. The disease is too frequently progressive, and goes on from bad to worse; the muscular compensation wears out, and the patient dies. But the murmur comes too late for successful preventive measures, and unless something can be done before the stage of murmur-production is reached, the patient gets little succor from the healing art.

Then, again, in chronic Bright's disease, when the vascular system is implicated, chronic aortic valvulitis is commonly found. Here, again, there is strain put on the aortic cusps, and disease is set up in them in time. There is first arteriole contraction and a high arterial tension set up by waste nitrogenized material in the blood in excess; the obstruction offered to the blood-flow induces hypertrophy of the left ventricle, and the high blood-pressure in the arteries is maintained until atheromatous changes are set up. Here we find a distinct series of symptoms: a firm, incompressible pulse, not obliterated by pressure of the finger; often the artery feels hard from changes in its walls; an hypertrophied left ventricle; a copious flow of

urine, which, Traube has pointed out, is the measure of the arterial pressure being high, is also present; and accentuation of the aortic second sound, from the violent closure of the aortic cusps. Such are the four associated indications. The high blood-pressure in the arteries, and the forcible closure of the aortic valves, lead, in time, to aortic valvulitis of a chronic character. Such, then, are the associations of aortic valvular disease.

When the above-described condition is found, we know that aortic disease may follow. Is it desirable, then, that the morbid process should be allowed to go on until disease is well established, as evidenced by the unmistakable testimony of a murmur? Something may be done to stave off the threatening valvular disease, whose consequences are so disastrous, if the indications can be read aright and in time. In the striker's case change of occupation, in the case of chronic Bright's disease a change of dietary,—the giving up of all superfluous albuminoids,—will probably arrest or retard the onward progress of the process.

An attempt was made to show that in some cases there is a certain amount of muffling of the aortic second sound, intermediate betwixt the stage of accentuation and the development of a murmur. In the discussion which followed, Drs. W. H. Broadbent, Arthur Sansom, and Stephen Mackensie took part. The stage of accentuation and the associated condition described were admitted by all. Dr. Broadbent questioned the stage of muffling. He said he had often followed the stage of accentuation of the aortic second sound to the development of a murmur and to angina pectoris, but he had never heard the muffling. He had heard a murmur developed while the loud aortic second sound was still distinct. This, he said, was due to the fact that the second sound of the heart is not due, as is generally supposed, to the clo-sure of the semilunar valves. Dr. Sibson had demonstrated, beyond all further doubt, that the second sound was due to tension of the arterial roots,-the sides as well as the base formed by the semilunar valves. Consequently a regurgitant murmur might be heard while the aortic second sound, due to the tension of the base of the aortic column, could also clearly be distinguished. As to the significance of the accentuated aortic second sound, there could be no doubt that it was one of our most important diagnostic indications. Dr. C. J. Hare pointed out that this accentuation was often heard for years without aortic valvulitis developing itself. whole tenor of the discussion was strongly in favor of the view propounded, viz., that there is a stage of aortic valvulitis before a murmur is produced; that, indeed, a certain and distinct amount of disease is requisite to the production of a murmur.

The whole of our knowledge of the causes,

origin, and progress of diseases of the heart, alike in the muscular walls and the valves, is such now that we no longer rest satisfied with a diagnosis that certain disease is present at certain orifices and that this is accompanied by a definite muscular change in the heartwalls. From this fragmentary view we can construct the past history of the case and forecast the probable future. From the history of one case we can recognize another at an earlier stage. A knowledge of the causation leads up to preventive as well as palliative treatment. For purposes of insurance such knowledge is imperative; in the interests of the patient himself, such knowledge is most desirable.

One of the side-issues raised in the consideration of aortic valvulitis was that of how far it may become static under favoring circumstances. Latham first showed that mitral disease resulting from acute endocarditis is often static, non-progressive, and without tendency to get worse, in certain fortunate cases,—a fact borne out by one's own experience. How far aortic valvulitis can be arrested and brought to a stationary condition is a subject not yet settled. It is a very important matter, however.

J. MILNER FOTHERGILL.

#### PROCEEDINGS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF PHILA-DELPHIA.

THURSDAY EVENING, DECEMBER 12, 1878.
THE PRESIDENT, DR. H. LENOX HODGE, in the chair.

Abdominal tumor from a child æt. 13 months. Presented by Dr. Joseph V. Kelly.

S., æt. 13 months, was perfectly healthy from birth until nine months old, when the abdominal tumor was accidentally discovered by the mother. I saw the child within a few days after this discovery, and at that time the tumor occupied half of the space of the abdomen, the largest bulk being on the left of the median line. The little patient suffered, apparently, but little from pain, and there was no vomiting or diarrhea. Previous to death, the abdominal veins were distended and a moderate amount of effusion was detected. At the post-mortem the tumor seemed to spring from the omentum and intestines, and was with great difficulty enucleated from the abdominal viscera, excepting the liver and spleen, which were apparently healthy. There is no history of cancer in either the father's or the mother's people.

Report of the Committee on Morbid Growths.

"A histological examination of the abdominal tumor presented by Dr. Kelly demonstrates the new formation to belong to the

typical class of growths, consisting of a single tissue, having its prototype in the physiological striated muscular tissue. It is composed of long narrow fibres measuring the one three-thousandth of an inch in width, many of which present a transverse striation seen with a power of 500 diameters; upon the fibres are found numerous oval nuclei. The arrangement of the fibres is in bundles, which run in every direction. The new formation may be classified as a myoma, variety rhabdo. "December 26, 1878."

Sarcoma of the neck. Presented by Dr. CARL

Eliza B., æt. 65, presented herself at the Dispensary for Throat Diseases at the University Hospital on the 21st of January, 1878. She complained of difficulty of deglutition and a swelling in the anterior region of the neck. By questioning her it was found that she had a slight cough, with yellowish expectoration, but no hoarseness or soreness of the throat. The swelling in the neck, she said, had made its first appearance about six months previous, as a small hard lump in the right side of the neck, and had been growing ever since. The difficulty of deglutition had, however, been noticed only a few weeks ago, and was growing daily worse.

On examination, it was found that a hard tumor was situated in the anterior region of the neck, reaching from the hyoid bone down to within a half-inch of the right clavicle. It was but slightly movable, and appeared divided into two unequal parts by a longitudinal depression corresponding with the isthmus of the thyroid gland. On palpation, the tumor

felt hard and nodulated.

A laryngoscopic examination revealed the epiglottis to be so pendent as to obscure all view of the laryngeal cavity. On raising it by means of the epiglottic forceps, it was found that the lateral diameter of the larynx was very much elongated; the mucous membrane presented a healthy appearance.

As an operation for the removal of the growth—which was supposed to be a scirrhus of the thyroid—was deemed inadmissible, tincture of iodine was injected into the tumor, with the result of reducing it somewhat. The neck at first measured around the point of greatest swelling sixteen and one-half inches, while a few days after the injection it measured at the

same point but sixteen inches.

The difficulty of deglutition, however, steadily increased, until the patient was unable to swallow anything, and was kept alive by nutritious enemata. The cough increased, also difficulty of breathing, and the expectoration became brownish. Owing to the feeble state of the patient, a physical examination of the lungs, as well as an exploration of the œsophagus, was not made. She died on the 12th of February of the same year, about three weeks after I first saw her.

At the post-mortem examination, at which

Dr. Curtin kindly assisted me, the body was found emaciated, but not as much so as might

have been expected.

The abdominal viscera were found to be nor-The lungs were congested, presenting a few calcareous nodules. In the neck was found a large tumor, of firm consistence and of about the size of two fists, involving the trachea, larynx, œsophagus, and the internal carotid artery on the right side.

On microscopic examination, this tumor proved to be a spindle-cell sarcoma, contain-

ing giant cells.

Rectal calculus. Presented by Dr. R. W.

DEAVER.

On the 1st of November, Mrs. Y., a monthly nurse, æt. 55, called my attention to a small "hard lump" situated just within the anal orifice, which, she said, had first made its appearance six weeks previous. She stated that it was loose and movable, and that in the process of defecation it came down, acting like a ball-valve, so completely shutting off the canal that she was only able to have a motion of the bowels by placing her finger in the anus and holding back the "lump," allowing the fæces to pass beside the finger.

Previous to its appearance her bowels had been very regular and moved daily: now she would allow them to go four and five days, on

account of the annoyance.

Digital examination proved the existence of a rounded tumor about the size of a pigeon's egg within the sphincter, covered by mucous membrane, and at first gave the impression of a fibroid on the posterior aspect of the uterus; but upon making a vaginal exploration with the finger it could not be felt. was readily pushed up by the finger in the bowel, but the mucous membrane covering it was always present. As the examination gave her considerable pain, I concluded to resume it under ether, which I did the following day, with the assistance of Dr. Müller. As soon as the anæsthesia was complete, Dr. Müller passed his finger into the rectum and verified the covering of mucous membrane, but, by pushing it up as far as his finger would pass, dislodged it from its pocket into the bowel, from which it was easily removed.

There was no history of biliary colic further than an attack of cholera morbus some two years ago, which had been treated by home-opathy and herself. Ten years ago she had a perineal abscess, which was opened by the knife, and healed slowly, and from which there is a small, non-suppurating fistule, involving the muco-cutaneous membrane, a quarter of an inch from the anal orifice, and

without the sphincter.

Report of the Committee on Morbid Growths. "A section of the rectal calculus presented by Dr. Deaver showed it to consist of a nu-

cleus, body, and cortex.

"Ist. The nucleus.-This was found to consist almost entirely, if not entirely, of granules of altered bile-pigment, apparently containing neither cholesterin nor any apprecia-

ble quantity of inorganic salts.

"2d. The body.—This was made up principally of cholesterin arranged in a radiating manner around the nucleus. A small amount of bile-pigment, also earthy salts, were diffused throughout this portion.

"3d. The cortex-Consisted of laminæ arranged around the body as a rind, and was composed of cholesterin, with a large propor-

tion of bile-pigment and earthy salts,

"The presence of glycocholic acid was determined from a watery extract made of both the body and cortex. It no doubt was diffused through both.

"Microscopic examination demonstrated the presence of crystals of cholesterin and

phosphates. "December 26, 1878."

Gangrenous inflammation of the duodenum.

Presented by Dr. J. T. ESKRIDGE.

I am indebted to Dr. C. for the history of

the following case.

"Mrs. E. M., æt. 55, born in Norfolk, Va., where she lived for thirty-nine years, eighteen years married, sixteen years a widow, mother of four children, was a large, muscular woman, always enjoying excellent health till about 1874, when, living in Washington, D.C., she had intermittent fever at different times, and occasionally suffered from what she called 'cramp colic.' Some of these attacks were marked by persistent nausea and violent vomiting. Her father suffered from no hereditary disease; her mother died of cancer of the uterus. Beyond this, no positive history of cancer could be traced to other members of her family.

"September 16, 1878, she was seized while walking the streets of this city, about one and a half squares from her residence, with a sense of weight in the epigastrium. She hastened home, threw herself upon the lounge, and had a severe chill or rigor, attended with great nausea and vomiting. I saw her about fifteen minutes afterwards, and found her somewhat delirious, with severe retching eructations of a brownish frothy fluid, pulse 120 per minute, weak and fluttering, cold extremities, large drops of cold, clammy perspiration covering the surface, but she crying that she was burning up, and begging for ice-water to cool her internally. Gleaning a history of malaria, I suspected a congestive chill, and treated my patient accordingly, and also endeavored to relieve the nausea and pain of which she complained.

"September 17, morning. - She is more comfortable; nausea continues, with lightness of head and dimness of vision; there is no pain over the epigastrium, but there is great tenderness to the touch in this region; pulse 112, temperature 103°; tongue covered with a grayish fur, papillæ enlarged, and bowels constipated. The bowels are so stubborn as to

require active and powerful purgatives before a slight evacuation from them is effected. The stomach is very irritable. Citrate of magnesium is the only agent I find that will check the vomiting. The stool on this occasion is dark.

"September 18.—Two days after my first visit I learn that she had been delirious during the night; complains of great pain in head and left hypochondrium, and inability to lie on the left side. Nausea and vomiting still troublesome; bowels opened once; pulse 118 and weak: temperature 103%; first sound of heart weakening.

"September 19. - Pain in splenic region much greater; stomach more tolerant; pulse

116, temperature 103°, and bowels costive.
"September 20.—Vomiting checked, but nausea continues; bowels opened once; stool dark; pulse 112, temperature 103°; pain in same region.

"September 21.—Pain referred to epigastrium instead of the splenic region; pulse 110,

temperature fallen to 10210.

"September 22.—Tongue reddened at its tip and edges, but heavily coated in the centre; intense pain in the epigastrium; pulse 110, temperature 102½°; bowels opened twice.

"From this time she gradually improved; pulse and temperature both decline gradually till, October 1, she is able to sit up for a short time, though she presents a very sallow appearance, as she has done throughout her illness. The conjunctiva is clear. Between this time and November 16, the beginning of her fatal illness, I saw her several times. She never grew strong, and required a smart purgative to unload the bowels.

"November 16.- I am summoned hurriedly, and find her with a severe chill or rigor, nausea, vomiting, shortness of breath, and great pain in the right hypochondrium. Supposing a return of malarial trouble, I treat

as on September 16.

"November 17.—The nausea and shortness of breath continue; a constant dull pain in right hypochondrium, extending over epigastrium; pulse 85, temperature 101°; bowels constipated for several days, urine scanty.

"November 18.— Bowels opened once; shortness of breath more marked; sits up in bed and gasps for breath; yet I am unable to detect any abnormal condition of heart or lungs; pulse and temperature same as the

day before.

"November 20 .- Patient delirious during the night; is very despondent, and says she will not live; shortness of breath and tenderness same as two days ago; great tenderness over the epigastrium; pulse 90, temperature

"November 21.-More delirious; gradually

sinking; pulse 95, temperature 1011

"November 22. - Delirium increasing; pulse and temperature the same; a smothering sensation. The next day the pain is most intense over the pyloric region of the stomach:

pulse 100, temperature 102°

"November 24.—Pulse 105, temperature 1022°; is very much prostrated; a craving for food at 2 A.M; spat up blood during the night. and does not attempt to move the right arm from the morning of the 24th till the morning of the 26th, when she died.

"November 26.—Pulse 118, temperature 103°; apparently insensible, but evinces evidence of pain when touched in the epigastrium. She died calmly on the morning of

the 26th.

"Her treatment throughout both attacks of her illness consisted in large doses of quinine, morphia, and brandy when there was any evidence of the vital forces failing; besides, calomel was used in small doses, and a flyblister from time to time over the painful

portion of the abdomen.'

Autopsy, twenty-six hours after death, by Dr. Eskridge. — Body appeared well nour-ished; no abnormal amount of fluid in the abdominal cavity; liver, kidneys, and pancreas apparently healthy. Spleen small, and covered by little vesicles; its interior was intensely reddened and granular as seen by the unaided eve. The mucous membrane of the stomach was congested, but no ulcerated spots; its walls apparently normal through-Mucous membrane of the duodenum almost black, ending abruptly, about twelve inches from the pyloric valve of the stomach, in almost healthy mucous membrane, its walls very dark and easily torn, and surrounded by a localized peritonitis. The remaining por-tion of the bowel appeared healthy. The gall-bladder contained a large gall-stone. The uterus was inflamed and enlarged, its appendages normal. The thoracic cavity and the cranial were not examined.

Remarks.—Had I known the history of the case for the last week previous to death, I should have examined the thoracic cavity. From the history, in the absence of an autopsy of that cavity to the contrary, a pneumonic inflammation may justly be suspected. The doctor under whose care she was during her illness did not suspect any trouble in the bowels, and especially none of an inflammatory character: hence the rather free use of purgatives, which his good sense would have taught him to avoid if he had been aware of

the real trouble.

He tells me that he was not satisfied with his diagnosis, but suspected malarial poisoning, inflammation of the liver, and probably cancer of that organ, and possibly of the stom-

ach or adjoining viscera.

Report of the Committee on Morbid Growths. -"A microscopic examination of the spleen from the case of gangrene of the duodenum presented by Dr. Eskridge exhibits the changes peculiar to chronic inflammation, viz., an increase of the fibrillar connective tissue of the organ. This is particularly evident around the blood-vessels, where the adventitia is seen in a manifest state of proliferation.

" December 26, 1878."

#### GLEANINGS FROM EXCHANGES.

Poisoning by Aconite, by Liquor Ammo-NIÆ, BY SWEET SPIRIT OF NITRE (TWO CASES). -Several cases of poisoning have been reported in the London journals in the last month or so. Of these, one is the case of a servant-maid of 21, who swallowed two ounces of a liniment composed of equal parts of aconite liniment and almond oil, the aconite liniment containing one ounce of root to one of spirit. Directly she had swallowed it she noticed a nasty taste in her mouth, and immediately felt a tingling sensation in her lips, mouth, and tongue; her teeth felt as if they were loose, and her lower jaw felt dead. Tingling then began in her fingers and extended all over the body, and she felt numb. Attempting to go down-stairs, she fell when she had reached the bottom. Fifteen minutes after the ingestion of the poison, she was found in an hysterical condition, with the pupils di-lated. Twenty grains of sulphate of zinc were at once administered, which produced copious vomiting. She became unconscious a little later, and was admitted to a hospital two hours after having taken the aconite. On admission, she was in a state of collapse, the surface of the body cold, the pulse almost imperceptible, respiration quick and shallow, the alæ nasi dilated, and the pupils widely dilated. stomach-pump was passed and the stomach emptied. Brandy and hot coffee were then given freely, the patient being able to swallow fairly. She was placed between blankets, with hot bottles to her feet. Half an hour later the surface of the body became warmer, the teeth chattered, the pulse was 75, small and feeble, and the respiration catching. There was contraction of the muscles of the abdomen and thorax which caused her to spring up in bed. Nitrite of amyl inhalations relieved the spasms, the pulse became stronger, and the deadly pallor of the face disappeared. After this she became more sensible. By the end of five hours from the original accident the patient was perfectly sensible. She soon went to sleep. Temperature taken two hours after admission was found to be 95.5°. Four hours later it was 99.8°. She passed a good night. Next morning she complained of soreness of the mouth. She was discharged, cured, at the

end of four days.—Lancet, December 28, 1878.

A case of poisoning by liquor ammoniæ is reported in the Medical Times and Gazette for December 21, 1878. A man 64 years of age swallowed half a pint of the liquor with suicidal intent. Shortly after, an emetic of mustard and water with castor oil was administered. When admitted to the hospital,

four hours later, he was semi-conscious, his pupils were widely dilated, and his breathing noisy and hurried; pulse very rapid, profuse sweating. The patient complained of great pain in the abdomen, and while under examination vomited a quantity of blood, mucus, and shreds of mucous membrane. Six hours later, he was very hoarse and was drowsy; face dusky and skin dry; temperature 100.8°, pulse 130. He had again vomited blood and mucus. Next morning his lips were swollen, tongue dry, and mucous membrane of the mouth partly eroded. The fauces were extremely congested, and almost met in the middle line; the mucous membrane looked œdematous, softened and inflamed. There was great pain and tenderness in the abdomen on the slight-est pressure. Tympanites marked; bowels open three or four times during night, no blood in stools. Had vomited blood twice since the night, and complained of burning pain in the throat and pit of the stomach. In the evening, coma, dyspnœa, respirations 66, pulse 180. Incessant retching from the first. Patient died thirty-six hours after swallowing the medicine. Post-mortem examination showed signs of inflammation all along the digestive tract. The mucous membrane in the stomach was charred and destroyed, and there was great congestion as far as the lower end of the jejunum. The stomach contained about ten ounces of dark altered blood.

In the Lancet of November 30, 1878, is a report of the case of a child about 3 years of age who swallowed between three and four ounces of sweet spirit of nitre. On examination the patient was found in a state of collapse, cold, almost pulseless, insensible, both pupils widely fixed and dilated, breathing hardly perceptible. He had previously vomited undigested food, but no blood. Under treatment the patient rallied for a few hours, but died in the evening. Post-mortem examination showed inflammation of the mucous coat of the stomach, with thinning in places, duode-nal end of small intestines red, inflamed, and bile-stained; kidneys slightly congested (there had been albuminuria), membranes of brain highly congested, containing a large quantity of dark-colored blood; brain soft, pulpy, and quite wet; vessels congested; no traces of fluid in the ventricles.

A case of non-fatal poisoning by spirit of nitre is reported in the Lancet for January 4, 1879. The patient, a boy of 18, had taken an ounce of the medicine thrice daily for three weeks. His symptoms were suppression of urine, drowsiness, headache, some mental aberration, etc. He was relieved by dry cupping, aperients, and poultices over the kidneys. The first urine passed was slightly albuminous, but he made a good recovery.

BAVARIAN PLAN OF TREATING FRACTURES.

—Dr. Dawson (Maryland Medical Journal, January, 1879) gives a careful description of the plaster-of-Paris movo-amobile apparatus

used so extensively in the Franco-Prussian war. It is applied as follows. It must be put on so as to press evenly all parts of the limb, or it will be worse than a failure. It must fit as exactly as a well-fitted stocking. If a fracture of the leg is to be dressed, two pieces of coarse flannel are selected that will extend from just above the condyles of the femur to three or four inches below the heel and are wide enough to envelop the leg. These are sewn together down the middle by two seams a quarter of an inch apart; this is to form a hinge. Between the hinge no plaster is admitted; it must not reach the flannel along this line. Then place this under the limb so that the hinge-line may be directly in the Bring the sides of the inner layer up, and join them with a seam along the tibial spine, down over the dorsum of the foot, to the space between the great and second Now sew together that part of the inner layer which is below the heel; make this union along the sole of the foot to correspond in line with the junction on the front of the leg. The foot and leg are now completely stockinged, and the superfluous flannel is cut down to leave a roach about an inch wide. Mix the plaster with cold water, and, while the assistant is pouring it over the stockinged leg, apply it evenly to all parts with the hand. Then spread it over the inner surface of the outer layer of flannel, which lies flat out, and afterwards bring this up and adjust it to the inner layer smoothly. The hand here also must be the instrument for moulding the parts. for pressing the plastered flannel, for adjusting it to all the elevations and depressions of the limb. Where the two layers come together at the roach the angle must be a sharp right angle; there must be no want of fit, no irregularity in the line. In this the hands of the assistant may be used in pressing the parts into position. To examine the fracture at this stage, or later, the stitches uniting the inner layer may be cut and the sides pressed apart like the valves of a clam-shell, the hinges on the posterior of the limb permitting this. The case or splint can be kept in place, after it has been divided, by cutting notches in the roach and at each notch surrounding the limb with a fillet of muslin. These fillets can be untied and the splint laid open for inspection with great ease. Openings for the escape of pus, etc., can be made in this splint to a considerable extent without impairing its value. The advantage which it possesses over other immovable splints is that it may be put on at once, helping to prevent swelling, and acting as extensor and counter-extensor by virtue of its hold on the trochanters and malleoli. Shortening, Dr. Dawson says, cannot occur. If the swelling subsides so that the case becomes too loose, a mattress of lint or cotton batting can be laid in and the leg again enclosed. The lining makes a pleasant addition.

EXPERIMENTS UPON THE FERMENTS (Virginia Medical Monthly, October, 1878).-Dr. Richard H. Lemmon, after many experiments upon the animal fluids, comes to the following general conclusions.

(1.) That quinia sulphate possesses more powerful anti-fermentative properties than any agent yet tried. In the proportion of one part of the salt to 160 of fertilized water, it prevented for nine days the development of infusorial life: although after four days it did not prevent the surface-formation of a mucedinous growth.

(2.) Creasote stands next, and, perhaps, should have been placed first, as it prevented fermentative creation-both animal and vege-

table—for eight days.
(3.) Then comes carbolic acid, having kept its infusion fresh for three days; and, lastly, salicylic acid must be placed at the bottom of the list, having prevented fermentative action only eight hours. The unprotected jar required one day, and that containing potassium salicylate, thirty-two hours, for the production of infusorial life.

The extreme volatility of amyl nitrite accounts for the fact of its having no power to delay fermentative action, notwithstanding its unequalled power of destroying existing life. The experimenter was not able to retain it in an infusion exposed freely to the air.

He looks for far better results in antiseptic work of every description from the use of quinia sulphate and creasote solutions than we now have from the universally used carbolic acid. In the case of quinia sulphate, it may be used effectually in the proportion of one part of the salt to 160 parts of water, the solution being rendered soluble by a minute quantity of hydrobromic acid. Such a solution would be much less irritating to the skin than the carbolic acid solution ordinarily used (that used by Lister being carbolic acid one part, water 30 parts). Also, the dressings might safely remain unchanged three times as long as in the case of carbolic acid. The latter advantage is most obvious to the surgeon.

DETERMINATION OF SEX BY THE DATE OF CONCEPTION (The Boston Medical and Surgical Journal, January 26, 1879).—Dr. J. B. Swift quotes Dr. Heitzmann, of New York, as propounding the following theory, and briefly mentions twenty cases which have come under his notice and which seem to confirm it.

The ovum represents the female element, the spermatozoa the male. We know that it requires only a few spermatozoa, perhaps a single spermatozoon, to impregnate an ovum. If an ovum becomes impregnated by a few spermatozoa, the female element will be in excess, and the result will be a female. If, on the other hand, a good many spermatozoa impregnate the ovum, the male element will preponderate, and a male will result. Now, if an ovum is high up, that is, in the ovary or at the fimbriated extremity of the Fallopian

tube, probably only a few spermatozoa will come in contact with it. But if the ovum is low down, then many spermatozoa come in contact with it.

If menstruation and ovulation are dependent the one on the other, as many authorities affirm, then the situation of the ovum may be determined by the menstrual period. During the interval between the periods the ovum is in the ovary. Just before the flow begins the ovum may be on the surface of the ovary or in the fimbriated extremity of the Fallopian tube. As menstruation goes on, the ovum descends, and the flow may entirely cease before the ovum is discharged. Then it is low down in the Fallopian tube, or even in the uterus itself.

Now, if coition takes place during the interval between two periods, or just before menstruation begins, the ovum being high up, only a few spermatozoa pass up the Fallopian tübe and reach it; but if coition is just after menstruation, then the ovum is within the reach of many spermatozoa.

Stock-breeders understand this. If they want a female they put the two sexes together at the beginning of the rutting period, but if a male is desired they wait until the female has

been in heat some time.

LATE HEREDITARY SYPHILIS (*The Cincinnati Lancet and Clinic*, January 11, 1879).— In the Society of Physicists and Physicians, Dresden Session, Dr. Seiler made a report on "syphilis hereditaria tarda" and affections differing from syphilis hereditaria recens-natorum, or infantilis, in the following distinctive peculiarities:

I. The first symptoms never occur earlier

than the fourth year after birth.

2. The symptoms show at once the character of the so-called tertiary syphilis, *i.e.*, gummatous periostitis, gummata of the liver, of the brain, of the skin, etc.

3. The symptoms often show an inclination to natural cure, exactly as do the gummata of acquired syphilis, which latter fact must be regarded as established.

Seiler agrees in the main with Kassowitz, but differs from Lewin, who believes in infec-

tion from the blood of the mother.

The fifth statement of the author is the most important. "With the resolution or disappearance of the secondary symptoms and occurrence of the tertiary ("gummatous stage" is a better term) necessary or unconditional heredity ceases. The inheritance of gumma follows from other laws. It is a disposition like scrofula.

The author takes up the question "Should a healthy woman who has conceived from a man notoriously having secondary syphilis be subjected to mercurial treatment?" This question is answered affirmatively.

Next follow cases of late hereditary syphilis, characterized by gummata upon the forehead, in the liver, cases of arrested development,

as those with infantile or even fœtal uterus, cases (aged between 7 and 20) of lupus-like rhinitis, with characteristic cicatrices in the throat, serpiginous ulcers with hyperostoses, characteristic solitary skin gummata, two cases of bone tuberculosis of the phalanges, spina ventosa, pedorthrocacia and lupus; cured, all of them, or relieved, by mercury and the iodide of potassium.

The author thinks physicians should be on the lookout for these cases of gummatous diathesis. The genuine ascites of childhood and epilepsy often rests upon this foundation. Also periostitides, osteo-myelitides, and arthropies of youthful age should always excite suspicion. So, when a bone-ulcer is found with a sclerotized wall or a capsule postmortem, as is often read in autopsy reports, syphilis hereditaria tarda has been mostly overlooked.

The common recommendation of mercurial inunctions by the old surgeons in the successful treatment of these conditions should not be forgotten. In the cures of epilepsy by the bromide of potassium, it should be remembered that this remedy acts as an antisyphilitic, like the iodide, even though this

action is much more feeble.

IODOFORM PASTILLES.—Dr. Whistler (Medical Times and Gazette, November 30, 1878) recommends pastilles with a gelatin basis for the purpose of applying iodoform to the back of the pharynx in syphilitic ulceration, etc. The gelatin basis is composed as follows: refined gelatin, one part; glycerin, two and a half parts; flavored water, two and a half parts; flavored water, two and a half parts; liquid cochineal, q. s.; to be made into a paste. This gelatin basis should be kept ready prepared, and when it is needed should be melted; the ingredients, whether iodoform or something else, are incorporated with it. The mass is then allowed to cool, when it is cut into tablets of the requisite size. Both in taste and in form the iodoform psstille is agreeable. It melts easily in the mouth, and is less painful to the inflamed fauces than a hard lozenge would be.

### MISCELLANY.

EXTRAORDINARY CURE FOR OZÆNA.—It is not often that we meet with such a cure for ozæna as that urged by Renzoni (Cbl. f. Chir., No. 50, 1878; from Il Morgagni), who, in the case of a child who had been for some time under the usual antiseptic treatment for ozæna, inoculated the nasal mucous membrane with gonorrhæal secretion. Having thus excited a specific inflammation of the nasal passages, Renzoni treated this first with a thirty per cent. solution of nitrate of silver, and then with tannin and antiseptics, effecting a cure in fourteen days.

Here is an item worthy to take the place of the well-worn story of the doctor who threw

everything into fits. How would it sound?-"Sir," said the doctor, "I cannot cure your child of the ozæna, but I can inoculate his little nose with the clap, and I am death on the

IF, since the morning stars sang together, there ever has been any system of medicine, religion, or science which illustrated the Yankee's definition of a flea,—"a crittur which, when you put your finger on it, warn't there,"—it is modern homoeopathy. Dr. Doane (January number of *The Homoeopathic Times*), in a panegyric on his favorite doctrine, says much as to what homeopathy is not. On dilutions he is "powerful." Witness the following:

"The idea that a given substance can be indefinitely diluted and its power indefinitely increased by agitation would have astonished the inhabitants of Earth in the darkest and most superstitious ages of ancient Egypt. The men who can believe such an incredible wonder should not deride those who exposed the sick in public places or treated disease by amulets, incantations, or charms; nor should they point the finger of scorn at the good old men who rubbed black cats over the stomachs of those who were tormented with the colic.

What Dr. Doane's homœopathy is must be gathered from the annexed paragraph:

"In my judgment, we have sufficient evidence to warrant us in the belief that many diseases are removed when drugs are administered which, if taken by a person in health, would produce certain morbid conditions resembling the existing disease. I say morbid conditions, in contradistinction to the host of symptoms gathered from the patient, which are as likely to be imaginary as real, and result as much from fancy as from medicine.

WE have received the well-known work of John Hilton on "Rest and Pain," in the form of a reprint by William Wood & Co., New York. The work itself is too well known to need any comment, especially as the present is not a new edition, but a reprint from the London edition of 1876 or 1877. The remarkable feature is the price, one dollar, the volume being the first one of Wood's Library of Standard Medical Authors. The type is clear, the paper not very fine, but white, opaque, and

all-sufficient for practical purposes.

DIPHTHERIA IN FOWLS.—We read in the Gazette des Hôpitaux the following results of M. Nicati's experiments on diphtheria in fowls: 1. This disease can be transmitted from the chicken to any other being. 2. It can be inoculated into the eye of an individual who has already been attacked by the same disease. 3. The further development of diphtheria can, if not suppressed, at least be retarded by protecting the affected part from the air, the diphtheritic process being entirely dependent on air or oxygen.—British Medical Fournal.

#### NOTES AND QUERIES.

THE following epitaph is stated by Dr. Goodell to have been taken from a tombstone:

#### DR. GREENWOOD ON THE DEATH OF HIS WIFE.

Death! O Death! thou hast cut down The fairest Greenwood in all this town! Her virtues and abilities were such, She was fitting to be wife of Lord or Judge; Yet, such was her condescension and humility Yet, such was her condescension and humility, She chose to marry me, a poor doctor of divinity; For which heroic act she stands confest, Above all women, the phænix of her sex, Who, like that bird, one young one she did beget, Not to leave her mate disconsolate. Alack! alas! my grief it is so sore That I can only write but two lines more: For hers and every other good woman's sake, Navez to let a blister phister he put on. Never to let a blister plaister be put on a lying-in woman's back.

Hall of Jefferson Medical College, Philadelphia, January 20, 1879.

At a meeting of the Faculty, held this day, the death of Dr. John B. Biddle, Professor of Therapeutics and Materia Medica, and Dean of the Faculty, was announced; whereupon the following was ordered to be entered upon the minutes of

the following was ordered to be entered upon the minutes of the Faculty:

"The Faculty of Jefferson Medical College find themselves plunged into the deepest sorrow by the death of their fellow-member Dr. John B. Biddle, Professor of Therapeutics and Materia Medica, and Dean of their body, which occurred on the evening of the 19th inst. As a friend, they feel sadly the void thus created, and mourn over the departure of a greatly-loved companion. Endeared to them by his noble qualities of head and heart, as their colleague and executive officer, they realize the irreparable loss of a sound and sagacious thinker, an able and successful teacher, and a faithful, experienced, and judicious executive, whose untiring zeal and earnest labors in his own department, and for the school at large, have contributed so much to maintain the usefulness

earnest labors in his own department, and for the school at large, have contributed so much to maintain the usefulness and advance the reputation of Jefferson Medical College. "The Faculty feel that words are inadequate to express their sense of this bereavement, but desire to make record of the estimate in which they held the deceased, whose memory they will ever cherish with sincerest affection. "They desire to convey to his sorrow-stricken family their warmest sympathy, trusting that in the knowledge they have of the esteem in which he was held in the community, and the love which was borne him by all his co-laborers and friends, and that he has left them, in the assurance of a Christian faith, for that larger life which is eternal, they find comfort and consolation.

for tand consolation.

"Resolved, That a copy of this testimonial of the Faculty be transmitted to the family of Dr. Biddle, and also to the honorable Board of Trustees, and that the Faculty will attend his funeral in a body.
"ELLERSLIE WALLACE, Dean."

AT the annual meeting of the Board of Trustees of the Ger-At the annual meeting of the Board of Trustees of the German Eye and Ear Infirmary, 441 North Fifth Street, the surgeon in charge presented the medical report of the working of the dispensary for the year 1878.

During this time there have been gratuitously treated in the dispensary 1186 patients, of which number 811 were for eye diseases and 375 for ear diseases.

The number of important operations performed in the Institute was 97, of minor operations 146.

The officers of the Infirmary are Charles H. Meyer, L. Westergaard, Dr. J. Aitkin Meigs, Dr. J. Koerper, Prof. John M. Maisch, etc.; surgeon in charge, Dr. M. Landesberg.

#### OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY FROM FEBRUARY 2 TO FEBRUARY

SEMIG, B. G., FIRST-LIEUTENANT AND ASSISTANT-SUR-GEON.—Assigned to duty at Fort Johnston, N.C. S. O. 18, Department of the South, January 28, 1879.

### PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, MARCH 1, 1870.

#### ORIGINAL COMMUNICATIONS.

NOTES ON THE LOCALIZATION OF DISEASES OF THE BRAIN.

BY CHARLES K. MILLS, M.D.,

Neurologist to the Philadelphia Hospital.

Read before the Philadelphia County Medical Society, January 22, 1879.

THROUGH the observation of patients, conjoined with autopsies, physicians can do something towards solving the problem of the cerebral functions, and my object this evening is simply to introduce the subject of the localization of diseases of the brain, by the presentation of some notes upon cases, with a few remarks on their import and bearing. For the sake of brevity, unessential details have been left out in reporting these cases, but nothing has been omitted that would affect their interpretation.

My first case was a married woman, aged 41 years. She came under observation four months before her death. Fourteen months before this time she had suddenly become paralyzed on the right side. Several years previous to this attack she had had rheumatism. An aortic regurgitant murmur was discovered. It was ascertained that, when first stricken with paralysis, she had some difficulty in deglutition, with positive facial paralysis and

aphasia.

On examination, she was found to have slight right facial paralysis, the lower part of the face only being affected. The forehead and right eve were not involved. She was decidedly aphasic, but could pronounce a few simple words, and seemed to understand what was said to her. She had well-marked paralysis of the right upper extremity. The shoulder was stiff; the forearm was semiflexed on the arm, and the thumb and fingers were also bent inwards on the palm; but these parts could be straightened by force, only, however, to return again to their unnatural position. The entire limb was a little wasted, and she frequently complained of pain in it. Her right lower extremity showed some loss of motor power, but not the distinct paralysis observable in the upper limb. It was paretic rather than paralyzed, and exhibited no contractures. No loss of

sensation could be made out. Faradocontractility was good on the paralyzed side.

This patient had phthisis, and also, as revealed by autopsy, an intra-thoracic growth, probably carcinoma, and a tumor of the liver. She died exhausted, suffering much the week before her death, from dyspnæa and pain in her chest and right side.

The autopsy was held eighteen hours after death. No disease of the skull or membranes was detected. An area of vellowish-white softening was found, involving a small portion of the hinder part of the third left frontal convolution, the lower end of the ascending frontal, the entire surface of the island of Reil, and a narrow segment of the adjoining temporal convolution. The substance of the left hemisphere was paler than usual. left corpus striatum and optic thalamus were normal. No other cerebral lesion was discovered. Slight vegetations were present on one of the crescents of the aortic valve, besides the other lesions to which I have alluded.

The second case was a man 40 years old, who had had two attacks of paralysis of the left side, from which he had in both instances, in a few weeks, almost completely recovered. The arm and face had been more affected than the leg. Examination revealed a paretic condition of the lower part of the face, on the left side; the mouth was drawn very slightly to the right; the eyes and upper face were unaffected; he had no aphasia. The left upper limb was weak, but he could elevate it to a horizontal line, and perform all movements with it, but not vigorously. Neither arm, forearm, nor hand exhibited paralysis or contractures in distinct groups of muscles. The left leg was a little weaker than the right, but that was all. No loss of sensation or interference with the special senses was present. The right side of the body was normal. While under my care he had two local spasmodic seizures, each lasting not over a minute, one involving the left arm and the same side of the face, the other only the lower part of the face. No change in his paralytic symptoms, and no subsequent stroke, occurred, but he died, a week after coming under observation, of what was supposed to be uræmic poisoning.

The post-mortem examination was made

nineteen hours after death. The skull and dura mater presented nothing abnormal. The pia mater was cedematous and moderately congested, particularly over the right hemisphere. Anterior to the fissure of Rolando, on the right side, was an arc It began above, of distinct softening. about an inch from the longitudinal fissure, at the border of the fissure of Rolando, extending forwards and outwards so as to involve slightly the posterior extremities of the first and second frontal convolutions, and then bending inwards and backwards again towards Rolando's fissure, the edge of which it reached once more near its inferior termination. The area of softening was irregularly crescentic in shape, and varied in width from one-fourth to three-fourths of an inch. The inner edge of the crescent and its ends, which were enlarged, were situated in the ascending frontal convolution. The portion of this convolution between the softened space and the fissure of Rolando remained unchanged. The diseased mass had invaded deeply the gray matter, and at each of its extremities had encroached upon the white substance. A small cylinder of the softened tissue reached to the median surface of the brain, about half an inch beneath the convexity. The arc of softening was the only discoverable lesion of the brain.

The lungs were ædematous. A cheesy focus was found at the base of the right lung. Both kidneys were highly granular.

My third case, reported in full elsewhere (Medical Bulletin, vol. i. No. 1, p. 13, January, 1879), was a man, 66 years old, who for at least eighteen months before his death had had hemiplegia of the right side, with aphasia, the paralysis being most decided in the arm. He had marked loss of sensibility in the right arm, forearm, and hand, and the same condition, but less pronounced, in the right lower extremity. Fourteen days before he died he had two severe attacks of right unilateral convulsions, and a week later he had a similar seizure. His hearing was defective, and he was irritable and emotional.

Post-mortem examination showed destruction, by softening, of the following parts: a small outer rim of the island of Reil; a posterior segment of the third frontal convolution; the lower thirds of the ascending frontal and ascending parietal convolutions; the upper border of the first temporal convolution; the Sylvian

border of the lower parietal, and the posterior portion of the upper parietal convolution.

Several examples of what I have supposed to be facial monoplegia have fallen under my observation, but I have not yet had the opportunity of confirming my supposition by an autopsy. In the Philadelphia Medical Times for October 26 and November 9 and 23, 1878, is a series of "Lectures on a Case of Facial Monoplegia," by John Guitéras, M.D., physician to the Philadelphia Hospital. I had the pleasure of seeing the specimen from the case, which is ably detailed and discussed in these lectures. The lesion which probably caused the partial facial paralysis present was a distinctly defined area of softening, which involved one inch of the length of the ascending frontal convolution.

The cases here reported may be looked upon as additional evidence that destructive lesions of certain districts of the cerebral cortex cause paralytic symptoms more or less extensive and permanent. They also indicate, from the local spasms occurring in the second case, and the unilateral convulsions in the third, that a destructive lesion of the cortex may at the same time be irritative, or that it may become In the first case, the so temporarily. aphasia, and facial and brachial paralysis, were due to a lesion of portions of the areas usually regarded as the centres for speech and for face and arm movements. The ordinarily given leg-centres, high up in the ascending frontal and ascending parietal convolutions, were not involved, although the right leg exhibited some loss The transient character of the of power. dissociated hemiplegia, which occurred twice in the second case, is of interest. The cutting off of blood-supply from the lodging of an embolus, in a case of this kind, may, in the first instance, include a larger area than subsequently undergoes softening. The effects of a sudden lesion also probably radiate for a time, for a certain distance, into neighboring parts. It will be recalled that the paralysis produced in animals by destruction of cortical areas was commonly transient. The arc of softening found in this second case was so situated as to involve only small portions of the general districts or centres for leg, arm, and face. The third case illustrated aphasia and tolerably complete hemiplegia from an extensive destruction of the cortical motor zone. The paralytic symptoms present in this patient resembled somewhat closely those produced by lesions of the basal ganglia. The unilateral convulsions were also similar to those which sometimes result from disease of the corpus striatum. The defective hearing, without disease of the ears, and the marked loss of sensibility on the paralyzed side, especially in the arm, are interesting, from the fact that some of the physiologists have located sensory centres in both the inferior parietal lobule and first temporal convolution.

I have notes of three unreported cases of hemorrhage into the optic thalamus, in all of which incomplete hemiplegia with hemianæsthesia had been produced. In each case the hemorrhage was large. The anæsthesia in two was pronounced; in one it was slight, and better made out in the arm than elsewhere. No spasmodic symptoms were observed. In one case the crus cerebri adjoining was involved in the hemorrhage, this patient being markedly hemianæsthetic.

In two cases of hemorrhage into the corpus striatum well marked motor paralysis of the usual type had been exhibited. Anæsthesia was not present, or, at least, could not be recognized. The lower fibres of the facial nerve were partially paralyzed; and the paralysis of the arm and leg seemed to me more decided than in the cases of hemorrhage into the thalamus opticus. In one case the clot was confined to the nucleus caudatus or intra-ventricular part of the corpus striatum; in the other, portions of both nucleus caudatus and nucleus lenticularis were included in the lesion. I give these cases simply because they are additions to actual experience, avoiding lengthy details, as the symptoms observed did not differ from those frequently reported. Recently, however, I presented to the Pathological Society of Philadelphia specimens from two cases of peculiar interest. In one of these the lesion was triple, consisting of a large clot in the right optic thalamus, a small cyst in the right corpus striatum, and a large cyst in the left corpus striatum, the symptoms being left hemiplegia and hemianæsthesia, without right hemiplegia. In the second case a small apoplectic cyst was present in the right corpus striatum, the patient not having been hemiplegic.

In still another case, never before re-

ported, I found softening, involving the entire right island of Reil, a portion of the second and third frontal and of the third and fourth temporal convolutions, where they bound the Sylvian fissure, and twothirds of the corpus striatum within the lateral ventricle. The symptoms observed during life were mental hebetude, slowness of speech (but not aphasia), dulness of hearing, slightly impaired sensibility on the left side, and general muscular weakness. He was not hemiplegic, as we clinically understand the term hemiplegia. The muscular weakness was a little more evident on the left than on the right side, but he used both arms and both legs with almost equal facility, and no contractures were

From a study of these examples of lesion of the great basal ganglia, it will be seen that, while partial destruction of the corpus striatum usually causes typical hemiplegia, such is not always the result. In some instances little or no paralysis occurs. Hemorrhage may occur into the optic thalamus also, without motor paralysis, although in all of my cases more or less complete hemiplegia was present. According to Nothnagel, indeed, lesions of which the thalamus opticus is the exclusive seat are not followed by motor paralysis at all. He also says that it may be regarded as demonstrated that lesions in the interior of the thalamus opticus cause no disturbance of sensibility. (Žiemssen's Cyclopædia, vol. xii. pp. 148

and 149.) Both the corpus striatum and optic thalamus are connected by fibres with the convolutions above, and below with the mesencephalon. In addition, a bundle of white fibres, called the internal capsule, is supposed to pass, compressed into a small compass, between the outside of the optic thalamus and the nucleus lenticularis, or portion of the corpus striatum which lies beyond the ventricles in the substance of the hemispheres. It is probable that within this internal capsule are included both the great sensory and motor tracts which go to and proceed from the convolutions, and it may be, as has been supposed by some, that true paralysis only occurs when the internal capsule is implicated directly or by pressure.

Time will not permit me, this evening, to go into any lengthy discussion of the various theories of localization and the question of the real nature of paralysis.

The broad fact that one-half of the body is controlled by the opposite half of the brain is of itself a strong point in favor of the general doctrine of localization. Cases without number, similar to those given in this paper, have been recorded to prove that paralysis usually appears on the side opposite to the brain lesion. Brown-Sequard's array of opposing cases is, after all, probably only sufficient to show that we may have exceptions to a great rule. This is especially likely, since recent embryological researches have shown that the decussation in the medulla oblongata is variable in character.

The tracts which go to and from the cortex also, doubtless, vary somewhat in their directions, and special centres may differ according to the age and habits of the individual.

In regard to the nature of paralysis, my personal experience has not as yet been sufficient to enable me to come to an absolutely satisfactory opinion. With Bastian (Paralysis from Brain Disease, p. 50), I incline, at present, to think that several explanations may be allowed, in accounting for paralytic phenomena. Some of the symptoms may be due to irritation, others to destruction of brain tissue, and in still other cases, injuries to the brain, besides causing direct symptoms, may produce stimulating or inhibitory effects upon more or less remote parts. I consider it probable, also, that a special form of inhibitory motor paralysis may result from a strongly irritative lesion of portions of the antero-frontal lobes. I reported to the Pathological Society of Philadelphia a case of fibroma, involving the first and second frontal convolutions, convolution of the corpus callosum, and corpus callosum, in which the paralysis present appeared to be of the true inhibitory type (Philadelphia Medical Times, January 18, 1879). I believe it not unlikely that we will learn to distinguish between paralytic symptoms due to inhibitory action, and those which are the result of pressure or tissue-destruction.

In concluding these brief notes I would say to those who may question the value of such investigations that even direct practical results from a study of cerebral localization have not been entirely wanting. They have been obtained chiefly in the domain of surgery. Thanks to the labors of such men as Broca, Bischoff, Turner,

and others, cranio-cerebral topography is now pretty well understood. The physician or surgeon can determine with considerable precision such points, for instance, as the relations of the fissures of Rolando and of Sylvius to cranial sutures, the superior levels of the great cerebral ganglia, and the situation with reference to external areas of such important convolutions as the third frontal and angular

The surgeon's trephine may be guided with greater certainty than ever before to the seat of a lesion. Broca, in 1871, successfully located an abscess of the third frontal convolution of the left side, and reached the lesion by operation. supposing the position of an abscess of the brain to be accurately determined, it may be said that an operation might be dangerous or impossible, and I recognize the fact that operative interference would only hold out hope in a limited number of cases. In the matter of organic cerebral affections. however, a little advance is a great gain. Huguenin (Ziemssen's Cyclopædia, vol. xii. p. 819) mentions an instructive case, in which Renz succeeded, after extracting the blade of a knife, in emptying an abscess which lay deep in the brain by successive introductions of a subcutaneous syringe. The patient was cured. He lived eight years and a half free from all brain symptoms, and died from hemorrhage of the lungs (or stomach?). It is true that in this instance an external opening was present; but it shows the possibility of emptying and healing an abscess deeply situated in cerebral tissue.

M. Proust (Med. Times and Gazette, December 16, 1876) communicated to the French Academy of Medicine the case of a young man who had received a bayonet wound on the left side of the head, and subsequently had partial aphasia and incomplete paralysis of the right face and arm, with other symptoms. With the aid of M. Terillon, trephining was performed. The aphasia and arm paresis instantaneously improved. Hebetude, which had been present, disappeared, and the patient eventually recovered. Trephining has been successfully employed in a similar case by another French surgeon, M. Lucas Champonnière, who has given to the profession certain data for determining the "line of Rolando" (Lancet, July 7, 1877). Aphasia, monoplegia of the face, arm, or leg, imperfect

hemiplegia, limited convulsions, strabismus, and nystagmus, are among the symptoms which can now be successfully employed by the surgeon in deciding upon cranial operations.

In medicine a more reliable prognosis can be given in intracranial affections if we can locate with accuracy the seat of disease. Regional diagnosis also is often a great aid to general diagnosis: knowing where a lesion is, we can frequently come to a more satisfactory conclusion as to what it is; and thus we may be able sometimes to discriminate to the advantage of our patients between such conditions as clot. tumor, softening, sclerosis, and meningitis. Mental diseases are becoming better understood; some of them, for instance, being found to be due to lesions of the cortex. macroscopic or microscopic. scribed cerebral meningitis is an affection which cannot always be recognized from the general picture drawn of it in ordinary text-books; but a knowledge of the varying effects produced by the disease, according to the region of the brain covered by the inflamed membrane, will often help greatly to a correct conclusion.

The substitution of one region of the brain for another whose functions have been annulled by disease, through some system of development by training, is a new path in cerebral therapeutics, which holds out some promise, and is an outcome

of the study of localization.

A study of the symptoms produced by involvement of successive districts of the cortex has done much to clear up the mists which have enveloped that interesting affection known as general paralysis of the insane.

## ELEPHANTIASIS, LEPROSY, AND TINEA IMBRICATA.

Extract from a letter addressed to Dr. Ruschenberger BY C. A. SIEGFRIED, M.D., U.S.N.

In the issue of the *Philadelphia Medical Times* for October 12, 1878, No. 284, is an extract from a letter addressed to Dr. Ruschenberger by Dr. C. A. Siegfried, U. S. Navy, referring to investigations of elephantiasis by Dr. Patrick Manson, of Amoy, China. It was stated, inadvertently no doubt, that he, in conjunction with Dr. Lewis, of India, and Dr. Bancroft, of Australia, had discovered and made known the

existence of the filariæ sanguinis hominis. The filariæ referred to were first described, and descriptions of them published in the Proceedings of the Academy of Natural Sciences of Philadelphia for 1850–51, by Dr. Joseph Leidy. In a brochure on "The Pathological Significance of Nematode Hæmatozoa," by T. R. Lewis, M.B., Staff-Surgeon H. M. British forces, etc., Calcutta, 1874, full credit is given to Dr. Leidy for these discoveries.

In a letter recently received, Dr. Sieg-

fried writes:

"Yorohama, Japan, December 20, 1878.
"Regarding filariæ sanguinis hominis, I have some interesting matter. I saw Dr. Manson, December 5, 1878, and he gave me the following case from his manuscript, which is important, and shows that he is making some headway both in his theory and methods of investigation:

"ELEPHANTIASIS AND LYMPH-SCROTUM—FI-LARIA IN LYMPH FROM VARICOSE GLANDS, BUT NOT IN THE BLOOD FROM FINGER.

"Henry M., æt. 38, chair-coolie by occu-

pation.

"No elephantiasis in family or neighborhood, he says. Has had enlarged scrotum for three or four years; attributes it to sleeping on the hill-side in the rain. Has fever seven or eight times a year, accompanied by swelling, redness, and pain in the scrotum. Now, however, it has more an elephantiasis appearance, though softer than elephantiasis usually is. No distinct vesicle or lymph-vessel visible. Never had dysentery or chyluria. The inguinal and femoral glands much enlarged; some of them varicose and others consolidated. In lymph from one of the former, extracted with a subcutaneous-injection syringe, I found, to-day, 17th November, 1878, a languid filaria embryo. Six slides of blood, containing probably six drops of blood, were carefully examined, but no embryo was discovered in it. The subcutaneous syringe was again used to extract lymph from the groin glands, and clear lymph procured: in this four embryos were found in six slides, one containing two. The embryos were very languid in their movements, one, at least, being shrivelled, the lash at the head standing out very distinctly, even when seen with a low

"Besides the unquestionable filaria embryos, numbers of threads about  $\frac{1}{100}$ " in length were found in the lymph, their appearance suggesting that they were the collapsed tube of the embryo, the body of which had disappeared by absorption or disintegra-

tion.

"This man's scrotum was amputated. It had the appearance usual in elephantiasis.

It was carefully dissected, but no mature filaria was found.

"Since the operation, fourteen days ago, the swelling of glands has subsided, and the

case is doing well.

"I read the case as follows. In elephantoid disease parent filariæ have developed in the lymphatics; by their presence, or by the irritation their embryos excite, lymphatic vessels may or may not inflame. If they do not inflame, the embryos pass freely along the lymph-vessels to the blood, and there is no elephantiasis; if they do inflame, the channels in the lymph-glands are obstructed, either by inflammatory effusions, etc., or by the embryos themselves. Lymph-dropsy happens on distal side in consequence; if obstruction is complete, so that no lymph circulates, this fluid is organized into solid tissue-elephantiasis; if there is no obstruction, but still partial circulation, there is lymph-scrotum.

"Now, to find filaria embryos one must look, in elephantiasis pure, in the distal lymphatics; in lymph-scrotum, in the lymphatics or blood; in filaria [disease?] without inflammatory complication, in the blood. After a time parent filariæ die, but their embryos may survive, gradually becoming less and less active, until they degenerate and are absorbed or disintegrated, as undoubtedly occurred in

this case.

"This man's blood has been examined daily since the operation, but no embryos have been found in it.

"You may form your own deductions from the above, but it is an advance, it seems to me, and it may answer some of your interrogatories concerning this matter of filaria and elephantiasis. At first, Dr. Manson often failed to find filariæ, but now, after his long experience, he readily picks them out on almost any chance slide of blood from the proper cases. I consider it a most difficult matter to find a filaria embryo with a fairly good power. The whole question is becoming clearer, and it seems reasonably certain that before very long elephantiasis and filaria sanguinis hominis will stand as cause and effect. Manson argues that he almost always finds filaria embryos in chyluria; that chyluria and lymph disease are associated in a large majority of cases; that lymph disease characterized by glandular engorgement generally, and lymph-scrotum, are usually associated, and that one or the other of the foregoing is commonly found in elephantiasis pure. From this chain he concludes that filaria sanguinis hominis is truly involved in the etiology of the dis-

"Perhaps you know that we went to

Foochow from Amoy, to aid in quelling riots in that city. The missionaries had some trouble, and suffered the loss of a school-building by fire. Nothing else was done. I had an opportunity, during the peaceful intervals, of visiting Foochow proper, in company of Dr. Osgood, of the American missions, and saw wonders. took me to a leper settlement, in which were some three hundred cases in all stages. The settlement is beyond the walls of the city about half a mile, and is not par-Here ticularly isolated or quarantined. live a complete community of lepers, of all ages, varieties, and conditions. Some keep shops; some work in the fields; some carry public offal; some begged, and many more were quietly waiting to die. I saw some mothers with babes in their arms. Upon inquiry, I learned they were married or not, as they pleased. One woman suckling a child was found to have a partially destroyed foot. A few were lying on straw mats, unable to rise, being in the last stage of the disease. I picked out a boy who was not leprous at all, but covered with the disease I wrote you about some time ago, tinea imbricata. He was supposed to be leprous, but sulphur ointment and missionary supervision dispelled that notion. These poor people simply go, and are sent by public opinion more than anything else, to this little village, live and die, and beget more lepers, not knowing supervision or government care at all. They receive no treatment, or none is given them, beyond very occasional visits from missionaries; in fact, nothing is done for them. By accessions from the city close at hand, and surrounding country, they keep about the same number. A rude enclosure surrounds the settlement, and their fields are close by; at night they go within the gates to their shabby huts, and in the morning to their customary labors. Those having trades follow them; but one can see that work is not for great gain, but for bare subsistence.

"The missionary physicians are few and hard-worked, and give no time to experimental work, here. They have more than they can do with disease susceptible of some amelioration at their hospitals and dispensaries connected with the chapels. I have seen a medical missionary treat out-door patients for two hours, and in that time operate on three fistulæ in ano, evacuate several abscesses, pull teeth,

excise a sebaceous cyst from the plantar surface of the foot, extract polyps from the nose, perform iridectomy, and minor things without number. He had two native assistants, yet he did nearly everything himself, except handling the patients. To look after a hospital of more than forty beds, two out-door dispensaries, and the families of the missionary community, native and foreign, all for eight hundred dollars a year, requires high qualities in these days. Besides, there is a constant temptation, on the other side of the river. to practise among the foreign commercial community, at about four thousand a year. He has been solicited to do so, but he sticks to his post. These medical missionaries do more good than any other; in fact, the only visible good.

"Foochow is said to contain over a million of inhabitants. It is a great tea place, and is situated on an alluvial plain, thirty-six miles from the sea, on the river Min. Here may be seen one of those examples of Chinese economy so striking to outside barbarians. Having frequently observed water-closets built over square fresh-water ponds, here and there about the city, and noticing there were fish in the water, I inquired about it, and learned that it is customary to use those fish, and that they are literally cultivated and sold from those places. A nature's laboratory! The fish is a species of carp, and grows to three or four pounds' weight.

"In the district of Fuhkien eighty per cent. of the inhabitants have itch disease in one of its various forms. I have this from a gentleman in practice at Foochow,

who took pains to get at the matter. "The new tinea which I mentioned Dr. Manson calls tinea imbricata. It may be distinguished from tinea circinata by its invading all parts of the body, gradually, in a series of concentric rings, no part healing in its track; by its appearance, similar to that of a piece of watered silk; by its obstinacy; by the fact that it is usually from India or the Straits settlements, and by the microscopic appearance. The spores are more numerous and clustered than in tinea circinata; the mycelia are rarely or never twisted into ropes, but spread uniformly over the field, and the scales are larger. The epidermis is excavated and raised in flakes, and the fungus confines itself to the more superficial layers of the corium."

URTICARIA, ETC., FROM QUININE.

BY I. H. KING.

Captain and Assistant-Surgeon U.S.A., Post Surgeon,

SOME unusual toxic phenomena attending the exhibition of quinine having recently attracted attention, no apology seems necessary for recording any facts bearing upon the abnormal physiological action of this important alkaloid, and I therefore proceed to give you the particulars regarding a well-marked case of this nature which came under my observation.

In May, 1877, while stationed as post surgeon at Fort Concho, Texas, I was called in to prescribe for an officer's wife, æt. 22, possessing a sound, healthy constitution, suffering from quotidian intermittent fever. I ordered a mercurial cathartic that evening, and to commence next morning with quiniæ sulphatis, gr. v tertiâ quâque horâ. About 9.30 A.M. the following day I was hastily summoned to this lady's bedside, and found her in an alarming and truly pitiable condition: her face, eyelids, and neck were puffy and cedematous, the whole body suffused with a scarlet efflorescence, great dyspnæa and præcordial oppression, fauces swollen and inflamed, dysphagia and sensations of choking, very rapid pulse, much febrile disturbance, considerable deafness, dilated pupils, severe headache, a wild expression of countenance, extreme restlessness and intolerable itching,—the latter being so severe that she was almost unable to resist tearing and scratching herself to pieces.

Only one dose of the quinia salt (gr. v) had been taken, two hours before, which was, she informed me, the cause of these grave symptoms,—she having been similarly affected on previous occasions after the administration of this antiperiodic.

The exanthema was vivid red and of an urticarious character, extending over the entire surface, with wheals on the chest, sides, and flexures of the joints, coalescing and running together, covering large spaces of integument; these wheals were accompanied with subcutaneous cedema and stiffness of the parts. The cutis was remarkably hyperæsthetic.

In the foregoing it will be observed that many of the first indications of cinchonism, as produced by ordinary therapeutic doses of quinia, were present, but intensified.

The alkaloid is said to be quickly dissolved by the acid gastric juice, and thus

rendered favorable for rapid absorption: in the present instance its effects were no doubt exaggerated by being ingested early in the morning on an empty stomach after the action of the purgative. However, the brief period which had elapsed justified the conclusion that all the drug might not be taken up, and accordingly the stomach was thoroughly evacuated with an emetic of sulphate of zinc, preceded by mustard-water, the patient afterwards to have saline aperients and the body to be sponged with an alkaline solution. watched this lady closely during the day: improvement gradually took place, and in the course of twenty-four hours most of the distressing symptoms had disappeared. Her recovery was speedy and satisfactory; desquamation of the epidermis occurring from the second to the fifth day. ague did not return.

Of course the lady had no idea what medicine she had taken, or she would have named this idiosyncrasy. She stated that her sister and father (mother dead) were both affected in this toxic manner by

quinine.

I may perhaps be permitted to add in conclusion that it has been my lot to see quinine extensively employed in India and in this country, but that I have never witnessed any phenomena after its ingestion resembling those which I have here endeavored to portray.

Post Hospital, Fort McIntosh, Texas, Dec. 18, 1878.

#### NOTES OF HOSPITAL PRACTICE.

#### PENNSYLVANIA HOSPITAL.

CLINIC OF R. J. LEVIS, M.D., SURGEON TO THE HOSPITAL, ETC., JANUARY 15, 1879.

FRACTURE OF LOWER END OF TIBIA, WITH GREAT DEFORMITY, REQUIRING DIVISION OF TENDO ACHILLIS PRIOR TO REDUCTION—DRUNKARD'S FRACTURE OF THE ANKLEJOINT.

JOHN M., 57 years of age, was admitted into the Men's Lower Surgical Ward on January 7, 1879, having, on the preceding night, fallen on the ice and injured his left ankle, which rapidly became swollen and gave him intense pain. Upon examination, after admission, an oblique fracture of the lower end of the tibia was detected, the line of fracture being exceedingly oblique; it was attended by great deformity; the inferior extremity of the fractured tibia projected nearly through the

skin, threatening at any moment to convert it into a compound fracture.

In order to reduce the displacement and bring the fragments into apposition, I was obliged to divide the tendo Achillis: having done this, the parts were readily adjusted. The after-treatment has been conducted in the usual manner of treating such injuries in this hospital, keeping it secured in a fracture-box.

It is possible that by applying extension to the foot by means of a flat board, shaped to the sole and confined with a bandage, or the use of a gaiter, and making strong extension, we might have avoided tenotomy; but as the operation was not a serious one, and would not cause any subsequent inconvenience to the patient, the facility it afforded in the after-treatment of the case fully justified the procedure. On the other hand, had the bone penetrated the skin, as it threatened to do at the beginning, it would have involved not only the production of a compound fracture, but would also have led to an opening of the joint, with all the results of synovial in-

Removing the dressings, you notice that there is some lividity and cedema around the ankle, but the contour of the limb is good, and the fragments are in complete apposition. Since the primary operation the case has not required any treatment beyond keeping him in bed with his leg in the fracture-box. You can see how completely the displacing muscular power has been kept in abeyance by division of the tendon.

We have had a succession of these cases lately,—five cases within a week of this form of fracture,—and I believe that they were all caused by slipping upon the ice. It so commonly occurs in persons who are partially inebriated, that I have fallen into the habit of speaking of it as "the drunken man's fracture."

SEPARATION OF QUADRICEPS MUSCLE FROM THE PATELLA BY MUSCULAR CONTRACTION —TREATMENT.

This is a rare and interesting case, which came into the ward on the day before yesterday. He is a fleshy colored man; his name is William D., 55 years of age. Upon admission he made the statement that he had slipped while walking upon the ice, and, trying to recover his balance, his leg gave way under him, and he fell heavily backwards. He found himself un-

able to walk, and was carried to the hos-

pital.

I found in this patient, what you can see for yourselves, that there is a separation of the quadriceps muscle from the upper border of the patella, the bone not being broken nor injured,—a very unusual condition. I do not remember having ever seen a case similar to this.—that is to say. where the patella was intact; nor do I recall one exactly like it in the records of the hospital. Instances there have been, frequently enough, where the tendon being ruptured carried with it a thin shell, or greater or less fragment, of the bone; but such are really cases of fracture of the patella, and should be so classified; but there is none other in our records of complete rupture of the tendon of the quadriceps by muscular contraction: indeed. many surgeons have doubted the possibility of its occurrence.

My colleague Dr. Morton had a case\* very like this about a year ago, but in that one the tendon of the vastus externus was not torn, and remained, conferring some power of extension upon the limb. In this you see the muscle is entirely ruptured, and extension is completely lost. In all probability the records of the hospital will not show any other than these two exam-

ples of this peculiar injury.

The production of the injury in both the cases named was by strong and sudden muscular action. I have long believed, and have taught constantly in this room, that fracture of the patella is almost always the result of muscular force, and is almost never produced by direct violence, as many authorities have stated. Even Dr. F. Hamilton, in his work on fractures, asserts that this injury is ordinarily the result of direct impact. It is true that a gunshot wound or a severe blow upon the patella, as in falling against the edge of a marble step. might cause it in exceptional cases; but on examination you will always detect some abrasion or injury of the overlying skin accompanying such a direct fracture and indicating its nature. I need not say that this is absent in cases of fracture by muscular violence, as it is in the case before us.

Examining the appearance of the parts, you are at once struck by this great sulcus when the joint is bent to a right angle, which is exactly three inches in breadth,

and is immediately above the upper border of the patella. Placing my fingers in this depression, the condyles can be distinctly felt; no band of muscular tissue remains; all power of extension has been lost; but possibly some fascia and connective tissue may exist uninjured.

In Dr. Morton's patient no union occurred, and I should not expect in this case that a good cure can be accomplished, although eventually some bands of fibrous tissue may be formed which will restore some usefulness to the limb; but we should not look for as good a result here as we would in a fracture of the bone. In simple fracture of the patella after the fragments are brought together, I know of no reason why we should not get bony union, although the contrary opinion has been

strongly advocated.

After consultation we will determine what shall be done for this man in the way of operation. I may possibly cut down upon the tendon and fasten it to the patella by wire sutures, either drilling two small holes in the patella for the wire to be fastened in, or else introducing a screw into the bone, the two wires being fastened to a single screw. In the mean time, for a week or two, I intend to keep him quiet on his back, with his leg extended, a bandage being applied so as to keep the patella up as near to the tendon as possible. patient is a stout, muscular man, and this injury may seriously affect the future usefulness of the limb.

ANGULAR ANCHYLOSIS OF KNEE—IMMOBILITY OF PATELLA AFTER RHEUMATIC INFLAM-MATION, WITH CONTRACTION OF HAM-STRING TENDONS—OPERATION.

I have a patient, who will now be presented, with an extremely deformed knee, following an attack of rheumatism. The joint is not anchylosed with bony union, but there is contracture of tendons, which keeps the leg bent almost at a right angle. His name is Joseph B., 24 years of age; admitted January 13, 1879. The history he gives us is that in August last he had what was called acute rheumatism, which involved several of the large joints, but remained longest in his right knee. Dr. Hall, of Burlington, tells us that he attended him, and that the acute articular inflammation extended to nearly all of the large joints, and lasted about two months.

Examining this knee, the first thing noticed is the constant flexion, and, secondly, that the patella is displaced out-

<sup>\*</sup> Published in the Medical Times, vol. vii. p. 174.

wards, and is fixed in its new position by firm adhesions. At the same time there is no real synostosis. A limited range of motion has been preserved, though it is extremely small. This check to extension seems to be owing to tendinous resistance, particularly the hamstring tendons; the one made the most tense by extending the leg seems to be the outer tendon, or that of the biceps.

The two things to be done in this case are, to attempt to dislodge the patella, and, after trying passive motion, to divide such tendons as interfere with restoration of the limb to its normal position. I propose to proceed cautiously in this case, in

doing what we find is necessary.

We shall etherize the patient and institute passive motion, and then endeavor to displace the patella by force. As soon as anæsthesia is produced, I shall flex and extend the leg, and shall probably gain considerable by stretching the several adhesions; then we can determine what tendons are particularly involved, and perform tenotomy if needed. I can hardly expect to straighten this limb at once, but if there is not too much structural change, and the tendinous resistance is the only check, it can be restored very speedily; though I should scarcely expect great structural alteration in the joint to occur since only last August.

The position of the patella requires the most attention for the present. In cases like this, when it is fused by inflammatory adhesions, it may sometimes be dislodged by placing the sharp corner of a piece of wood against its outer edge and striking a sharp blow with a mallet, the block being guarded by being wrapped in several turns of a bandage, so as not to injure the skin.

A tenotome should have a blunt point and a round edge; for tenotomy you will never require a sharp-pointed tenotome such as you find in your pocket cases. With a round edge like this it is very easy to insert such an instrument through the skin for the division of tendons. the tendons stand out saliently there is nothing to fear; the operation is a simple one. Insert the knife at the point selected for division, by holding the blade parallel with the border of the tendon, and introducing it vertically until it is beneath the level of the tendon; then, depressing the handle, the cutting edge is turned upward and outward, and the cord is divided by a sawing movement; the instrument is then withdrawn, and the small opening sealed by adhesive plaster. In cutting the hamstring tendons there is no danger to be feared in the inner one; on the outside there is nothing to keep in mind but the peroneal nerve, which runs along the inner edge of the tendon.

The adhesions yield readily to passive motion, but the tendons require division. Turning the patient over on his belly, I insert the tenotome at the inner side of the biceps tendon, close to its edge, so as to escape the nerve. I have divided the outer hamstring tendon, which now loses its rigidity; passing to the inner cord, the same procedure is accompanied by a snap,

as it also yields.

Restoring the patient to his former position, I will now make firm pressure upon the outer edge of the patella with this block of wood, bracing it against my chest. After several attempts the patella now yields and slips back into its place. Look at the limb! Now it is nearly straight, in marked contrast to its condition when he was brought into the room a few moments ago.

Our object in the subsequent treatment will be to hold what we have gained, and to avoid inflammation, or, at least, to keep it in check. We will have extension applied to the limb, by the same method that has long been in use in this hospital for the treatment of fractured femur: a broad. band (two and a half to three inches wide) of good adhesive plaster is applied to the outer and inner side of the limb, making a loop under the sole of the foot, in which a perforated block is placed, through which passes the cord to which the weights may be attached for making the extension. The leg should be shaved before the plaster is Two transverse strips now pass around the limb, one above the ankle and just below the knee, to keep the first from slipping. Around this a roller bandage is applied, the ends of the lateral strip being turned back at the knee under the bandage, since it is not desired to make extension higher than the joint. As pressure will do a good deal in keeping down inflammation, a closely applied roller bandage shall be carried up to the groin, and, in passing over the femoral artery, just before it goes through the tendon of the adductor, a compress is applied, in order to reduce the amount of blood going to the part, and to prevent undue arterial reaction. The entire limb is now enveloped, including

the foot, and we are ready to apply the extension. The cord from the little block at the sole of the foot runs over a pulley, which is temporarily fastened to the frame of the bedstead; to the end of the cord is attached a crate or frame-basket, made of four stout wires fastened at the top and bottom, in which you may put as many pound weights as you desire, up to fifteen or twenty pounds, thus enabling you to regulate your extension from day to day. This I consider much more satisfactory than the brick ordinarily used for extension, which is often heavier than is needed. and which affords us no means of graduating the force applied.

We have accomplished fully as much as I expected to-day, and the extension may yet bring the limb completely into a straight position; if not, we will see what can be done by passive motion at a future time. We have now only to guard against inflammatory over-action. Should the bandage not prove sufficient to keep down the inflammation, I shall have the knee enveloped in ice; india-rubber bags filled with pounded ice are very effective in keeping down the temperature. We shall add to this general compression by the bandage, the compression of the femoral artery, the application of cold to the knee, and the extension of the limb by weights.

### PATHOLOGY AND TREATMENT OF ANAL FISTULE.

This man has what is reported to be an anal fistule. I have not yet examined him, but will do so in your presence. I have endeavored to impress the fact upon your minds of the constant location of the internal opening, and of the error of looking for it too high up. You will not fail to find it if you know where to look for it; it is always situated near the anus, just within the inner border of the sphincter muscle.

The method of diagnosis of anal fistule resembles the first step in the operation for its relief. Oiling a probe, you will introduce it into the external opening of the sinus, and hold it in one hand while you insert a finger of the other hand into the anus, where you will feel for a small point in the location just mentioned, where there is a feeling of loss of substance in the wall of the bowel. Having found it, substitute a slightly bent, grooved director for the probe, and now it passes through the fistulous tract, and, with the aid of the finger, is brought out of the anus. Di-

viding the tissue upon the director is a simple procedure, and completes the operation, for which no anæsthetic was needed. The wound must now be packed with a tent of oiled patent lint, to make it heal from the bottom.

A rectal fistule may be termed a collapsed abscess. It is the result of an abscess which originally may have been quite large, but subsequently contracted after its contents were allowed to discharge. abscess may have dissected the loose tissue along the side of the rectum for a considerable distance, thus permitting your probe to pass up along the bowel. Remember this point: no matter how high up the abscess has extended, you will always find its inner opening, if it have one, just inside the sphincter muscle. The object of the operation is to close this false passage from the bowel, and, if you succeed in this, you will invariably cure your patient.

### OSTEO-SARCOMA OF THE LOWER JAW-AMPUTATION.

This is the patient (a German, 25 years of age) who was operated upon at the last clinic for the removal of the jaw-bone upon one side. You will remember that it was a medium-sized tumor, of slow growth. It had been coming on for eighteen months, and at the operation it was found to involve the body and part of the ascending ramus of the inferior maxilla upon the left side. No glands were enlarged, and no especial difficulty was experienced in the operation.

The disease was found to have begun in the periosteum, and subsequently invaded the bone, forming one of the varieties of ordinary osteo-sarcoma.

The patient has not had a single bad symptom since the operation. The wound has nearly healed, and seems to have almost completely closed up in this comparatively short time.

The pathologist of the hospital, Dr. Longstreth, has examined the tumor, and reports that it is an ordinary spindle-celled sarcoma. From the fact that the entire growth was removed, and that there was no glandular involvement, I am led to believe that there will be no return of the disease.

According to the Registry of the Illinois State Board of Health, the total number of physicians in the State is 4950: of these, 3646 are regular; 437 homeopathic; 456 eclectic; 37 physio-medical; not stated, 336; all others, 38.

#### TRANSLATIONS.

PERFORATING ULCER OF THE ŒSOPHA-GUS.—Goll (Cbl. f. Chir., No. 3, 1879; from Corresp. f. Schweitz. Aertz.) showed, at a meeting of the Zurich Medical Association, a preparation of an œsophageal ulcer perforating the trachea. The patient was a man of 39, emaciated, but able to work up to within fourteen days of his He took little nourishment; complained of dysphagia, which could not be accounted for, either by the œsophageal sound or by the laryngoscope. The sound could easily be passed, but could only be retained one or two minutes, on account of cough and dyspnæa. During the last eight days the patient had extremely fetid Post-mortem examination eructations. showed an enormous ulcer situated at the bifurcation of the trachea and perforating The distorted and carcinomaforwards. tous tissues had broken in such an irregular form as to make a very imperfect opening. There were several centres of carcinomatous deposit in the lungs.

REBELLIOUS EPISTAXIS PRODUCED BY A PARASITE. - Dr. Laudon, of Elbing ( Jour. des Sci. Méd., p. 57, 1879; from Berlin. Klin. Wochens.) reports the case of a robust workman, of 42, who had suffered from perihepatitis during the Franco-German war in 1870. The disease was complicated from its origin with occasional very abundant epistaxis, which lasted seven vears and was accompanied by a sensation of pressure in the left nasal cavity. amination with the speculum showed a corresponding swelling of the mucous membrane. The patient would not submit to tamponing the posterior nares, and no medication availed. Finally, one day, on blowing the nose, a parasite like a lumbricus escaped, the caudal extremity of which vibrated very rapidly. The expulsion of this parasite was followed by complete cessation of the epistaxis. On examination, it was found to be pentastoma tænioides, a parasite which usually inhabits the nasal cavities of dogs and, more rarely, of horses and goats; occasionally, of man. These parasites spend their early life encysted in the thoracic and abdominal cavities of certain herbivora, and, on arriving at maturity, escape and travel to encyst themselves anew elsewhere. It is probable that in this case some of these parasites had excited inflammation in the liver,

which would account for the perihepatitis observed in 1870. Afterwards they may have become once more encapsuled, when the perihepatitis disappeared. x.

THE ANTAGONISM OF MORPHIA AND ATROPIA.—Dr. Knapstein has made some experiments with a view to solve this muchdisputed question (Jour. des Sci. Méd., 1879, p. 55; from Berlin. Klin. Wochens.). His conclusions are as follows: 1. The simultaneous administration of morphia and atropia does not increase the tolerance of the latter drug in doses which may be called toxic, although the dose of morphia injected could not produce death by itself. On the other hand, the same may be said of the treatment of morphia-poisoning by atropia. 2. The sum of the doses of the two alkaloids administered frequently does not amount to that which would be required of either alone to produce the same effects. 3. Except the question of dose (animals were experimented upon), these results can be applied to man, and it may be positively stated that atropia and morphia cannot be used as antagonistic in poisoning by either drug. The Jour. des Sci. Méd. adds the case of a man suffering from insomnia and night-sweats, to whom were administered pills of atropia and morphia. The amount used to control the sweats and produce sleep was decidedly less than would have been required had either been alone employed.

For Furuncles.—Ext. arnica, 10 parts; honey, 20 parts; powdered lycopodium, enough to make a paste. Mix, and spread upon a bit of cloth, and apply, changing twice daily. At the same time take from twenty to thirty drops of tincture of arnica

internally every second hour.

THE DAWN OF SCIENCE.—At a late scholarship examination at Rangoon, a candidate replied to the question, "What is liberty of the subject?" "To be able to eat as much as you like of a good dinner." At a former examination, a lad defined the chief feeders of the

Irrawaddy as tigers, elephants, and alligators. DIMINISHED NUMBER OF MEDICAL STUDENTS IN AUSTRIA.—The number of students of medicine in Austria has diminished greatly of late. In 1870 there were 1271 in Vienna, 418 in Prague, 257 in Grätz, and 80 in Innsbruck,—altogether, 2026. In 1877 Vienna had but 712, Prague 238, Grätz 138, and Innsbruck 45,—altogether, 1033. The whole number in 1877 was not equal to that in attendance at Vienna alone in 1870. The decrease has been progressive from year to year.

# PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, MARCH 1, 1879.

#### EDITORIAL.

#### YELLOW-FEVER EXPERTS.

THE "Proceedings" of the board of experts authorized by Congress to investigate the vellow-fever epidemic, recently published, makes it possible to form an idea of the work which will be accomplished. From the methods and plans adopted, it would seem that the history of the late epidemic will be thoroughly studied. Such study may, of course, be of almost incalculable value in its bearing upon questions of quarantine, provided really incontrovertible results are reached. Thus, if it can be clearly established that the epidemic was imported, and that its march was everywhere arrested by absolute non-intercourse, or if, on the other hand, it is demonstrated to have been self-generated, theoretical questions as to the nature of yellow-fever poisons will have to step aside in quarantine discussions. The danger is that the most careful and skilful scrutiny will fail to establish the facts with such indisputable certainty as to render them available for positive generalizations. It is very likely that the commission will give us a good clinical picture of the disease. Unless, as is very improbable, some distinct new therapeusis is reached. clinical discussions of the fever must partake of the nature of John Thompson's news. Yellow fever has been studied so often, and so thoroughly, that there is very little opportunity for discovery so long as the old methods of study are adopted. Fortunately for science, the pathological work of the commission will be supplemented by the voluntary offerings to the world of Dr. Schmidt, whose very able paper in the last issue of the New York Medical Journal seems to overthrow the pathological conclusions and observations to which the commission, in the person of its chief microscopist, has already committed itself. If the head of the commission had had the extreme shrewdness which has given so successful a career to the leader of one of the national geological surveys, he would in some way have "bagged" the work of Dr. Schmidt, and shone more illustrious than ever with its reflected glory.

We have carefully examined the "Proceedings," to see whether the commission comprehends the wonderful opportunity for solid accomplishment which is seemingly open to it, namely, the establishing of the real nature of yellow fever. If it be true, as has been asserted by various eye-witnesses, that yellow fever is capable of transmission to the lower animals, it becomes a comparatively easy task for a skilful investigator to discover more of value about the disease in one year than all of the multitudinous "commissions" (and their name has been legion) have done in the century. The old plans of study have become "stale, flat, and unprofitable;" the new methods, properly applied, might yield a flood of light. The first procedure ought to be to determine whether the disease is transmissible to the lower animals or not. If it be so, the general nature of the poison, the laws of its generation and multiplication, the method in which it produces the symptoms and the pathological changes of the disease, might all be readily worked out with certainty and precision. Who knows whether it might not be shown that the disease is modified in its passage through the lower animals, in a manner similar to smallpox, and that "inoculation" or "vaccination" with the blood or secretion of the diseased animal may substitute a minor for a major disorder?

For such flights as these the commission shows no sufficient pinions. Giving it all

credit for earnestness, it seems plain that the best results to be achieved by it will be in the line of tracing the history of the epidemic, and that it is a fresh illustration of the extreme difficulty of fusing political ability and energy with scientific genius.

#### LEADING ARTICLES.

#### THE PLAGUE IN RUSSIA.

ON the first day of the present year there appeared in the London *Times*, among the various telegrams, military, political, and commercial, from all parts of the world, the following brief dispatch:

"Berlin, January 1.—A serious epidemic is reported to have broken out in Astrakhan."

Probably not one person in five hundred who glanced at this telegram thought of it a second time. The name "Astrakhan" itself has a far-away sound to most people, and the fact of any epidemic breaking out in such a remote corner of Europe ("or was it in Asia?") seemed of only the slightest interest. But on succeeding days further and more startling news was received of the extreme mortality of this epidemic; whispers of "the plague" began to be heard, and for the last six weeks the daily journals of Europe and America have contained a regular bulletin on the progress of the plague, while the English weekly medical journals have given, in each of their recent issues, some account of the nature of the epidemic, and of its course so far as known. The importance of such an epidemic is not confined to Europe, but, such are the rapidity and frequency of commercial intercourse throughout the world, affects us in this country also, as will appear later. But even if this were not the case, and if the spread of the plague were to be confined to Europe alone, its course and effects should be watched by us with great interest, for it is now several hundred years since the "Black Death" has been seen in the West of Europe, and our present quarantine, so far at least as we derive it from England, originated in the attempts to keep away and limit the spread of the plague.

The present outbreak in Russia has not occurred entirely unexpected or unheralded.

It is now some four years ago that Dr. Netten Radcliffe predicted the probable approach of the plague and suggested means for preventing its propagation. Germany, also, Dr. Hirsch, who is an authority on epidemiology, predicted, two years ago, the present extension of the disease from its lurking-places in Persia and about the eastern and southern shores of the Caspian Sea. It is only a few months ago that news came of the existence of plague in the provinces of Ghilan and Astrabad, in Persia (see map), and rumor said that it had also appeared at Baku, in Transcaucasia, just where the Caucasian Mountains dip into the Caspian Sea. Now, these places carry on a considerable trade with the Russian towns on the Volga, and particularly with Astrakhan, which is one of the great centres of Oriental commerce through which the marts of Central and Western Europe are, to a considerable extent, supplied with Oriental merchandise. Moreover, it was through Astrakhan that cholera was introduced from Persia at the time it last prevailed throughout Europe. These known facts rendered it reasonable to conclude, when tidings of an "epidemic" in Astrakhan were received, that the disease in question was the dreaded plague.

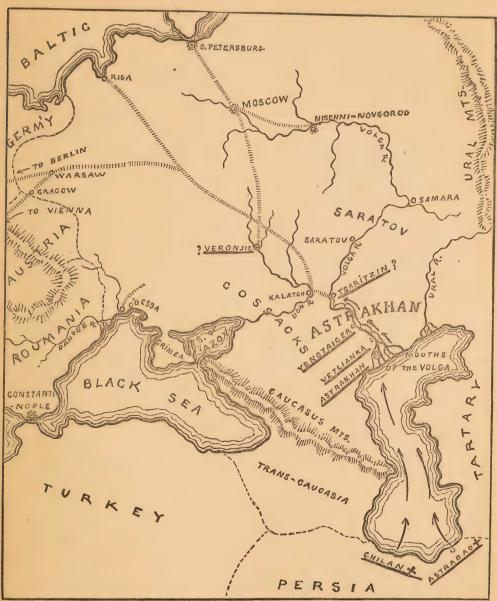
The place and manner of the original outbreak in Astrakhan are obscure. A Cossack, so the story goes, returning to his home in Vetlianka, a village of some eighteen hundred inhabitants, situated on the Volga, a short distance above the city of Astrakhan, brought with him from the war a shawl, which was probably part of his booty. This he presented to his sweetheart. The girl wore the fatal gift for a few days, when she sickened with all the symptoms of the plague and died. During the following four days the rest of the family, six in number, sickened and died. The disease spread rapidly, but the authorities, it is said, did not pay any attention to it, declaring it to be merely typhus. But the mortality was frightful; half the inhabitants of the village died. Of eight physicians detailed for duty among the Cossacks of the district but one survived. The utmost panic seized the few remaining inhabitants; they fled, carrying the seeds of the pestilence with them, to the neighboring villages, until some nineteen

were devastated.

All this, it must be remembered, occurred

before any news of the disease reached the ears of the outside world, for the epidemic in Vetlianka broke out about the beginning of November. The supineness of the Rus-

typhus, which has been so fatal among the Russian troops during and since the late war. The report of Dr. Döppner, the surviving medical officer of the district, shows sian authorities in dealing with the epi- that the disease was somewhat anomalous



Localities already attacked by the plague are underscored. Places of origin are, in addition, marked with a cross. The direction taken by the plague is indicated by arrows.

demic in the first instance is remarkable, | in the symptoms it at first presented, aland can only be explained on the hypoth- though later every manifestation pointed esis that the doctors of the district made a mistake in the diagnosis of the disease, considering it at first as an outbreak of is as follows:

"At the beginning (O.S.) of last November several inhabitants of Vetlianka were attacked with fever. After several paroxysms, and at the end of seven or eight days, the lymphatic glands of the armpits became swollen. On receiving information of this occurrence of fever, I visited Vetlianka on November 18 (O. S., November 30 N. S.), and found there eight sick people presenting the following symptoms: moderate fever, enfeebling and intermittent: the patients still on foot, with appetite, sleep, and the organic functions unaffected; abscesses, spontaneously formed and discharging much matter, of the lymphatic glands of the groin or of the armpits; duration of the malady from ten to twenty days. All these patients eventually recovered. In the month of May, 1877, I had observed symptoms similar to these, and also ending in recovery of the patients, at the advanced post on Mount Caucasus, where five out of forty persons were seized with them.

"After the 27th November, 1878 (9th December), a new disease appeared in Vetlianka, which attacked numerous people, some of whom succumbed to it. I made a second visit to the place, and I found there twentythree persons suffering as follows: violent headache affecting the forehead and temples; pains in all the limbs; transient shiverings preceded by burning heats in the body and the eyes; abdomen tense; liver enlarged; pulse 100 to 120. These symptoms continued for three or four days, and in the more favorable cases were followed by perspiration and general enfeeblement; but in the greater number of the cases the symptoms recurred at the end of two or three days, and were followed by delirium, sleeplessness, restlessness, a temperature of 42° R., dryness of tongue, dejections very frequent and involuntary, urine scanty and reddish, and death occurred after the second, or more rarely after the third, paroxysm, with convulsions and total prostration of the vital powers. The corpses rapidly became decomposed, and cadaveric discoloration occurred twelve hours after death.

"From the 17th (29th) November to the 9th (21st) December, of one hundred persons attacked, forty-three died and fourteen recovered. After the 9th (21st) December the character of the malady became much more acute. The person attacked was suddenly seized with palpitations of the heart, irregularity of pulse, vomiting, faintings, oppression at the chest, and spitting of clear fluid blood; the aspect became pale, the expression apathetic, the eyes dull, and the pupils dilated. The patient lay for three or four hours in a state of absolute prostration, then a violent accession of fever with delirium followed, the urine was suppressed, and there was constipation.

"After the 10th (22d) December, to all these symptoms were added spots upon the

body of dimensions varying in size from a pea to a piece of ten copecks; the sick exhaled a peculiar odor, something like honey, and death was preceded by lethargy and collapse. The corpses became decomposed at the end of two or three hours. From the 9th (21st) December to the 14th (26th) December the number of patients continually increased, and finally reached one hundred.

"During my first visit to Vetlianka, I saw only six persons suffering from intermittent or low (debilitante) fevers, in the course of which the lymphatic glands became swollen (Griesinger), and I reported accordingly. This form of disease, according to Griesinger, sometimes precedes maladies of a more serious nature, a statement confirmed by the events under consideration. At the time of my second visit to Vetlianka, and during the

ten days I then passed there in the midst of

the epidemic, my observations showed me

that the disease was a kind of inflammatory fever, and I reported in that sense.

"According to the statements of the assistant-physicians who are under my direction, the disease which appeared on November 27 (December 9) appeared when there were no longer any cases in Vetlianka of the disease presenting the symptoms I observed on November 18 (30th). I admit, however, a close bond of connection between the first category of disease and the second. swelling, inflammation, and suppuration of the lymphatic glands were the principal symptoms of the first phase of the epidemic. These symptoms were reproduced in a frightful degree during the second phase, causing death in from twelve hours to three days. am disposed, therefore, to characterize this epidemic either as a very acute form of typhus, or as a peculiar kind of plague (pestis indica, Hirsch), or as a new disease of a nature intermediate between typhus and plague.'

Although the epidemic had assumed serious dimensions on the 25th of November, the government was not officially informed of it until the 11th of December, and it was not until ten days had elapsed that any systematic and energetic means were taken for preventing its spreading further. Once aroused, however, the authorities exerted themselves to the utmost to make up for lost time. A double cordon was formed, first around the infected quarter of the town, and then around the boundary of the town itself. Quarantines were formed on each side of the Volga, for some distance up the stream, at Sarepta, Iwanowka, Olvada, and Tsaritzin.

But if the supineness of the Russian government in dealing with the disease on its outbreak seems surprising, its course in at-

tempting to suppress all news on the subject, and in permitting the wildest rumors to be circulated everywhere, is no less surprising, and hardly less reprehensible. For what we know of the spread of the epidemic we are chiefly indebted to the enterprise of the Russian press, and, of course. news coming in this way is necessarily more or less exaggerated, and must be received with allowance. Among other dispatches was one to the effect that the ground was covered with dead bodies: others stated that all the towns along the lower Volga had been attacked and devastated; that the inhabitants had risen against the physicians, and, declaring they were poisoning the people, had sacrificed them to the popular fury, etc. Careful sifting seems to point to the following as a complete statement of the condition of

things: A disease—the plague—broke out in the province of Astrakhan about the beginning of November, raged with increasing violence among the villages and towns of the lower Volga, but has, since the middle of January, sensibly declined. A glance at the map tells the whole story, so far as known. It will be seen that, thus far, the plague has pursued its course along the line of the Volga, not spreading much laterally, and scarcely, if at all, getting as far as Tsaritzin. The various rumors of cases appearing in Veronjie on the Don, in Odessa, and even in Nischni Novgorod, far up the Volga, are not authenticated. What will happen in the future, however, who can say? It may be that the epidemic has been partially or entirely stamped out, as recent telegrams seem to imply, or it may be that the late cold weather has caused it to subside. But travel is so impeded in that country in winter time, no railroads having as yet been constructed along the Volga below Tsaritzin, that a lull might easily occur through lack of intercourse. The real danger will begin when, a few weeks hence, that magnificent highway, the Volga, is once more opened to traffic by the breaking up of the ice, and its fleet of five hundred steamboats again begins to pass along the line of the stream, from Astrakhan to Nischni Novgorod. The latter city, the renown of whose fair is world-wide, is always crowded with strangers from all quarters of the globe. This fair, held late in the spring and early summer, brings at least two hundred thousand merchants and traders together annually. The result of an outbreak of plague among such a throng would be most disastrous, and, it is to be feared, would eventuate in a general propagation of the pestilence throughout all parts of Europe.

Recent advices indicate a general "scare" in the countries bordering on and doing trade with Russia. A joint commission of eminent German and Austrian physicians has been dispatched to the seat of the outbreak. Drs. Hirsch and von Pettenkofer have been called in by the German government to advise upon measures to be taken, and we believe the Royal College of Physicians, of England, has also sent a commission to investigate the epidemic. Meanwhile, the various ports along the Mediterranean which have a commerce with Russia are putting all vessels from the Black Sea and the Sea of Azov in strict quarantine. Palermo, Trieste, and Malta, as well as, we believe, Marseilles and other ports, are closed against Russian ships. Along the borders of Russia, with Germany, Austria, and Roumania, there is talk of drawing a military cordon, of instituting a strict quarantine at first, and, if the plague comes near, of enforcing absolute non-intercourse. methods are stigmatized by the English medical journals as barbarous and useless, as experience has shown that the disease will slip through. The thing to do is to clean up at home, do away with all that may harbor disease, and then stand by, disinfectants in hand, prepared to give the enemy a warm reception.

A somewhat sensational report in the New York Herald of last week contains, however, certain hints which should not be lost upon our sanitary authorities. The article in question gives the result of an interview with certain large rag-dealers in New York. It appears that we in this country depend for our rags for papermanufacture largely upon Russia. rags collected from the filthy Muscovites are taken first to Italy, and are then brought over as a stuffing to secure the cargoes of Italian marble so largely imported. Now, if these rags are brought from one of the plague-stricken districts, they may arrive here months after the disease has been forgotten, and may be the source of the plague here in our midst. We commend this observation to the notice of our health authorities. Meantime,

we learn that at last energetic measures are being pushed by the Russian authorities. General Loris Melikoff, with a corps of specialists and an army at his back, has been made temporary ruler of the plaguestricken district, with autocratic powers, and, having fixed his headquarters at Tsaritzin, is purging it thoroughly of all discoverable agents which may serve to propagate the disease.

#### CORRESPONDENCE.

#### BOSTON LETTER.

M. EDITOR,—A renewed publication of interesting facts concerning the history of the Harvard Medical School will perhaps not be amiss, inasmuch as many who are watching the present course of the school know but little of its past. I glean most of these data from an 1846 catalogue of the school and from the very valuable "Life of John C. Warren, with his Biography and Journals," a work which every medical man, at least every American physician, should own or, at all events, should read. For both of these I am indebted to the kind generosity of Dr. J. Collins Warren. I have found additional information in Dr. Oliver Wendell Holmes's history of the school in the "Harvard Book."

Before the Revolution there was no medical school either in Boston or Massachusetts. Neither by examination, license, nor by any other means was the public assured of the qualification of a medical practitioner.

The only means of instruction were the scanty library and private practice of the physician. Occasionally a gentleman "went home to England" to attend the London and Edinburgh hospitals. In 1765 a medical school was established in Philadelphia; in 1768, one in New York. But in those primitive days no one thought of going to such distances for medical instruction. During the Revolutionary war objections to dissection were hardly heard on the field, and there was abundant means of studying practical medi-cine and surgery. In such a school was educated the man who was destined to found the medical department of Harvard University,-Dr. John Warren, younger brother, pupil, and subsequently assistant of Dr. Joseph Warren, one of the first victims of the war. By illness Dr. John Warren was forced to leave the army. He settled in Boston; was appointed Military Hospital Surgeon. This gave him opportunity to pursue the study of anatomy to a degree hitherto unknown in Boston. In 1781 he began to lecture on this branch of medicine. His course was attended by physicians and a few students, and finally created

such an impression that the government of Harvard University invited him to lecture at Cambridge and assist in the formation of a medical school; and thus was laid the first stone. The school became a fact, and was opened in 1783. The original plan contained a clause to the effect that when a professor of the medical school was requested by any other gentlemen of the Faculty to visit their patients, he should endeavor to take properlyqualified pupils with him. Dr. John Warren was appointed Professor of Anatomy and Surgery; Dr. Aaron Dexter occupied the chair of Materia Medica and Chemistry; Dr. Benjamin Waterhouse that of Theory and Practice of Medicine. The latter gentleman will be remembered in connection with the introduction of vaccination into the country at the beginning of this century. He was also in-strumental in establishing the botanical gardens at Cambridge. At this period opportunities for dissection were usually limited to one subject during a course. The difficulties in preserving the subject may be imagined. At this time, too, in order to reach Cambridge from Boston, it was necessary to cross by ferry, and in stormy weather to drive or ride nine miles around through Roxbury. In 1785 was conferred the first degree of Bachelor of Medicine, and the first graduate was John Fleet, who received his diploma in 1788. Medical instruction thus continued until 1800. "John Warren," says Dr. Holmes, "being the master-mind who gave the school success.

In 1805, Dr. John C. Warren, son of the professor, took a room in Boston over an apothecary's store (then No. 49 Marlboro' Street), and began demonstrations of anatomy to established physicians of Boston and a few medical students. These lectures he continued until 1810, meanwhile, in 1806, having been appointed Adjunct Professor of

Anatomy in the medical school.

In 1810 the professors succeeded in securing the removal of the school to Boston. Cambridge bridge, built in 1786, overcame the difficulty in reaching Cambridge, but the teachers of the school were now in full practice, and to go to Cambridge and back daily became a serious evil. Moreover, most of the students resided in Boston. All objec-tions, however, were finally overcome, and Dr. John C. Warren's little room over the apothecary shop was arranged as well as circumstances allowed, the school was transferred to it, and lectures were given here for several years. Lectures on anatomy and on hygiene were still given at Cambridge, this being a condition of the transferral. In the same year Dr. James Jackson was appointed Lecturer on Clinical Medicine, using the infirmary of the Boston almshouse as a hospital. As the number of pupils increased, the accommodations decreased in equal ratio. Dr. J. C. Warren and Dr. Jackson became particularly active in securing new quarters. Leaving

no stone unturned, in 1816 they succeeded in purchasing a lot of land and erecting a suitable building on Mason Street, besides obtaining a large grant for the University at Cambridge. The Faculty at this time consisted of Drs. James Jackson, Professor of Theory and Practice; Dr. J. C. Warren, Professor of Anatomy and Surgery, having been elected to this chair on the death of his father in 1815; Dr. John Gorham, Professor of Chemistry; Dr. Jacob Bigelow, Professor of Materia Medica; Dr. Walter Channing, Professor of Midwifery; the two latter having been appointed professors in 1815.

Connected with the institution was a library of five hundred volumes, which now contains about two thousand. In 1810 was also formed a society for mutual improvement of the students, -the Boylston Medical Society, -to which I made allusion in a former letter.

Meanwhile, too, the two Warrens, father and son, and Dr. Jackson, seeing the need of clinical instruction, agitated the subject of the erection of a hospital. Their earnest efforts culminated in the fine old Massachusetts General Hospital, which admitted its first patient in 1821. The McLean Asylum for the Insane was also erected and opened in Somerville, both institutions being under the charge of one corporation. These two retreats were the result of a contribution by subscription, the amount of which has rarely been excelled in this State. To-day the hospital is in most excellent condition, having been greatly enlarged by additional wards, and combining every facility which modern thought and science have invented. I shall allude to it in detail in describing the present condition and management of the school. At first, students were admitted on payment of a small fee. This afterwards was abolished. Medical visits were made semi-weekly, the students being conducted by Prof. Jacob Bigelow, who concluded his visit by a clinical lecture. Surgical operations were made on Saturdays, and this practice is still continued.

In 1829, Dr. John W. Webster was appointed Professor of Chemistry, vice Dr. Gorham, deceased. In 1835 was created the chair of the Institutes of Clinical Surgery, Dr. George Hayward being appointed professor. In 1836, Dr. James Jackson, after twenty-four years of service, resigned his chair, and Dr. John Ware was appointed in his stead. In 1847, through the liberality of Dr. George C. Shattuck, was established the chair of Pathological Anatomy, and Dr. J. B. S. Jackson made professor of this branch. He held the chair until his death, which occurred a few weeks ago. In 1855, Dr. Jacob Bigelow resigned the chair of Materia Medica, after forty years' incumbency. He was succeeded by the late Dr. E. H. Clarke.

Subsequent to the removal of the Medical School to Boston, subjects for dissection had been freely obtained; but great inconvenience

arose from the fact that the practice was not recognized by State laws. Between the years 1830 and 1844, however, through the efforts of the Massachusetts Medical Society, all difficulties were removed. In the year 1846 a handsome brick edifice was erected on North Grove Street, quite near the hospital, and, having been dedicated as the Medical College Building; the school was moved from Mason Street. This nearness to the hospital greatly increased the facilities for clinical teaching, besides saving much of the time formerly spent by the students between college and hospital. An independent wooden building was then erected for purposes of practical anatomy. To-day, however, this building is deemed insufficient, and a new structure will be erected elsewhere as soon as a proper location is secured. The Warren Museum, the nucleus of which was formed early in the century, occupies the whole depth of the college building. The main collection was presented by Dr. J. C. Warren, with \$6000 for its increase and preservation. The Museum has since received many valuable donations. In 1847 the late Dr. George Hayward presented one hundred and sixty-seven of Thibert's models illustrating surgical diseases. In 1849 the late Dr. John Ware gave a set of ninety models by the same artist. In 1875, Dr. Wigglesworth presented an excellent collection of models in wax representing various cutaneous diseases. The curator, the preserver, the guardian-spirit, one might say, of this museum has been, for more than thirty years, the late Dr. J. B. S. Jackson.

The physiological laboratory of the school owes its existence to a bequest of George Woodbury Swett. Dr. Lombard has presented a valuable collection of physiological apparatus. There is likewise a most convenient and roomy chemical laboratory, much of its apparatus having been presented by Dr. John Bacon, formerly professor of this branch. The study of histology was made a branch of the curriculum, some years ago, the ordinary impediment having been removed by Dr. Calvin Ellis, who presented the school with a collection of microscopes. So that to-day a student who, to a certain degree, was not practically familiar with the histological appearances of normal and abnormal tissues, and who was as unskilled in the use of the microscope as are the majority of students from many, from most, indeed, of the schools of this country, such a student would be considered unworthy of the Harvard diploma. In 1859 the Summer School was established. While it existed in that form the students were practically instructed in chemical, physiological, and histological research, but laboratory work at that time was elective. Since the change was made in the plan of education, the laboratory instruction has taken the place of, or has been added to, didactic lectures, and students are expected

to attend the laboratory courses as faithfully as the ordinary lectures. The change in the plan of the school was made in 1871. The vear is divided into two terms,—September to the end of February; then a vacation of one week, after which follows the second term, which ends with June. As you already know, the students are divided into three classes, and take up the various branches in their natural succession, "thus [to quote an exceedingly happy remark of Dr. Holmes's] passing through the entire range of medical studies in due order, in place of having the whole load upset upon them at once." I italicize the closing words, for it seems to me they present to one's mind the real effect of the pot-pourri style of teaching more sharply than any other reference to this matter which I can remember. We have but to recall the confused condition of our brains during our first year of medical study, and our vain attempts to systematize the chaotic effect of the mass of matter which was poured into our weary ears, in order to see at a glance how delightful must be the tranquil development now enjoyed under the system of study which is pursued in the medical departments of Harvard and the University of Pennsylvania. But the latter school still has something to do before it can claim that its diplomas are equal in value to those issued by the Harvard School. The greatest need is the adoption of the preliminary examination,—" preliminary sieve," as Dr. Bigelow quaintly terms it. And, rigorous as the Harvard plan of study now is, I have no doubt that before long another year will be added to the length of the course. Moreover, the examinations at the Harvard School are no longer oral, but written, three hours being devoted to each branch. In all probability, a man who stated that the blood passes from the lungs into the pulmonary veins, and thence into the aorta, and that the heart is lined by a mucous membrane, would hardly win a Harvard diploma. But within four years I knew a student who gave these replies to an examiner only a fortnight before graduation, and he was presented with his parchment. This, however, was in another school. So long ago as 1846 the Dean of the Harvard School was able to write as follows: "The character of the students in this school has always been highly respectable. A large number of them has had the advantage of a previous liberal education. From these circumstances it has arisen that no medical institution in the country, so far as we know, has supplied a greater number of professors to schools created in various parts of the United States." Up to that time forty-three graduates had been appointed to professorships. It need not be said that to-day the quality of Harvard medical graduates is better than ever. The care with which the annual examinations are made is shown by the latest statistics of the school. At the June exami-

nations for 1878 the rejections of first-year men amounted to 25\(^3\) per cent.; of second-year men, 16 per cent.; of men of third year, 5 per cent. in theory and practice, 11 per cent. in clinical medicine, no rejections in surgery or clinical surgery, 36 per cent. rejected in obstetrics,—an average of 11\(^4\) per cent. The average percentage of rejections, however, as you will observe, diminishes as the classes develop in medical knowledge. This is a wholesome indication of the character and quality of the teaching. But this is leading me into matters which I must reserve for another letter.

In mousing about for facts touching upon the history of the school, I find that in 1811 there was a good square fight between the Medical School and a body of twelve wellknown physicians, who petitioned the Legislature to constitute them and their associates "a body politic and corporate by the name and title of 'the Massachusetts College of Physicians,'" etc. It is more than probable that many Boston practitioners of the present day never heard of this controversy, which so nearly resulted in the establishment of a second medical school in this city. In his biographical notes, Dr. John C. Warren says that be-fore the professors of the Harvard Medical School became united with the State Society, the latter had uniformly opposed the school. Certain original members of the Society expressed the opinion that the Medical School should not interfere with the license to practise medicine, the Society at that time issuing licenses. This gave rise to the initial dispute, and the disaffected members left the Society. The result was that the Society lost the opportunity of influencing medical examinations, and also lost a large number of licentiates, young men naturally preferring the medical degree of the university to a mere license to practise. This was followed by the effort to establish a new medical school. The Society, the profession, and the Harvard School opposed this attempt. The faculty, John Warren at its head, waited upon the individual members of both branches of the Legislature, conversed with them, and invited them to attend the lectures in the school. This gave them a new interest in it, and led to the grant of money to the university already mentioned. Finally, a committee composed of Dr. John Warren and a large body of the veteran members of the profession met the Legislative committee at the State-House. The scene produced a deep impression, and was followed by discussions and debates in House and Senate, which covered a period of ten days, no other business being done. We can imagine the excitement of the town and State. When the question was taken there were two hundred and eighteen votes against the memorial, two hundred and nine in its favor. A reconsideration being moved and carried, the petitioners scoured the State for more

votes, which diminished the majority; but the latter defeated the plan, "and," says Dr. J. C. Warren, "great was the joy of the Medical School." At that time the Hon. Judge Story was Speaker of the House. He saw the inconvenience and injustice of the proposed plan, and took a decided stand against it, especially after Dr. J. C. Warren had written him an open letter, which was afterwards distributed throughout the community. probably had very much influence in deciding the matter. If the result had been different, there would have been two regular medical schools in Boston, neither of which could have attained the success which has always followed the Harvard School. "The results of this combat," says Dr. J. C. Warren, "were, on the one part, a successful medical school; on the other, a hostility which showed itself whenever it could do so with effect." For example, there was a most unpleasant interference in the supply of subjects to the school. This created much feeling. The controversy, moreover, was carried on with great warmth in the newspapers of the day. These difficulties, however, were subsequently overcome, and the school has followed an uninterrupted Some interesting features of its present curriculum I must reserve for another letter.

One of the early professors of the school, Dr. Jacob Bigelow, father of Dr. Henry J. Bigelow, has just been laid away in the beautiful Mt. Auburn Cemetery, which he originated and designed many years ago. The present generation rarely if ever saw him during life, for he lived in strict retirement. He was famous as author, teacher, and scientist. His vigor remained unabated until his eightieth year was past. Subsequently his sight began to fail, and during the latter years of his life he was quite blind; but he ever exhibited a sweet patience, cheerfulness, even humor, until the last. During these weary years he frequently beguiled the time by translating into Greek and Latin verse favorite ditties and nursery rhymes. These he presented in print to friends. He died at the age of ninety-one, having resigned his Harvard professorship in 1855, after holding the same forty years.

Dr. Bigelow was shortly preceded by Dr. J. B. S. Jackson, already mentioned in connection with the chair of Pathology in our Medical School. Dr. Jackson was appointed to this professorship upon its creation, and resigned it only with his life. He was vigorous, active, youthful even, but a few days before his fatal illness. When at the dedication of the Medical Library Association he made the motion for the appointment of a committee to memorialize Congress on behalf of the Index of the National Medical Library, I sat near him, and remarked the elastic freshness of his look and manner. He died at the age of seventy-two, beloved by all who knew him. He lived for his two museums, both of which

owe their fine condition, their unusual value, and their superb catalogues to him and him alone. One of these described the Cabinet of the Society for Medical Improvement, and amounted to three hundred and fifty pages; the other was an octavo volume of seven hundred and fifty pages, descriptive of the Warren Museum, and was the result of twenty years of diligent, patient labor. Dr. Jackson was not a practitioner, but a curator of such rare excellence that it will be long before his like is found. But, while famous as a pathologist, he knew nothing of microscopy. Yet with his unaided eye he became more familiar with disease than is many a skilled manipulator of lenses. The vacancy in the Harvard School created by his death has been filled by Dr. R. H. Fitz, former Assistant Professor of Pathology.

Boston, February 13, 1879.

#### PROCEEDINGS OF SOCIETIES.

PHILADELPHIA COUNTY MEDICAL SO-CIETY.

A CONVERSATIONAL meeting was held at the Hall of the College of Physicians, Philadelphia, January 22, 1879, Dr. Henry H. Smith, President of the Society, in the chair, at which Dr. M. O'Hara presented a patient who had recovered from an incised wound of the spinal cord. Before exhibiting the case he made the following remarks:

Recovery from penetrating wound of spinal marrow.

Cases of recovery from wounds of the spinal marrow are very rare. Gross says that "they are extremely apt, even when of small size, to eventuate fatally in consequence of their liability to be followed by inflammation and softening of the proper nerve-substance." Typical symptoms are given as the result of division of the spinal cord, but deviations occur occasionally from the usual marked symptoms. These deviations can now be explained from the advanced light we have of the physiology of the cord, without the necessity of our saying that "no case is complete without a post-mortem." I present to you the patient, with the history of the case, detailing the facts observed merely, without explanation, more than merely referring to its being unique on account of the apparent recovery, as well as the peculiar sensory, motor, and circulatory disturbances resulting from the

On September 24, 1878, I was called to see I. H. M., 24 years of age, and found him sitting up in a yard with his clothes on. He was very pale, and had a knife-wound in his coat, vest, and undershirt. On stripping him I found a wound, incised and penetrating, to the left of the mesial line, on a level with the

fifth dorsal vertebra. It was three-fourths of an inch long, and admitted the little finger to the depth of two inches obliquely inwards and upwards. The wound was oozing a serous fluid and blood. The bleeding was easily stopped by a compress. He had been stabbed with what was supposed to be a dirkshaped shoemaker's knife within a half-hour of my seeing him. He had fallen on his right side. This side of his body was soiled after the wounding, and prior to my seeing him, as made out by questioning, he had had loss of power, with sensation of "pins and needles," in the left leg. I put him to bed, and found now that he had good power over the left leg, but with defective sensation from the knee downwards, the anæsthesia becoming more as I tested it downwards, until at the dorsum of the foot it was complete. At this time the muscles of the right side from the nipple downwards were flaccid, and the right leg was paralyzed. In the same region he had exalted sensibility to touch, and pricking sensations. His pulse was 60; respiration normal.

One half-hour later his pulse was 67, and quite irregular. Camphor, valerian, and spirit of nitre were ordered. At 6 P.M., about eight hours after the reception of the wound, he reacted, his pulse becoming 112, and the temperature being 100° Fahr. Power now returned slightly in the right leg, above the knee, and he had less tingling and better sensation in the left foot. Tincture of aconite and bromide of potassium were prescribed. At 10 P.M. he had considerable return of power in the right limb and foot, but had very little sensation in the left foot. His pulse was 112; respiration 22; temperature 102°. He had headache and general sweating for sev-

On September 25 no change in the sensory and motor phenomena was noted. At 10 A.M. his pulse was 80, respiration 22, and temperature 100°. At 6 P.M. his pulse was 76, respira-

tion 16, and temperature 90%.

September 26.—He reported that the wound had pained him the night before. His abdomen was distended with gas. At 10 A.M. the pulse was 80, respiration 20, and temperature 99½°. He was given a laxative, and had a free passage, with copious urination.

The motor power in both limbs was now pretty good; but he still had some hyperæsthesia of the right side and anæsthesia of

the left.

September 27.—At 10 A.M. pulse 50, respiration 20, temperature 99°. At 6 P.M. pulse 72, respiration 20, temperature 99°. No other observations were made, the patient appearing about the same as on the previous day

September 28.—Everything seemed in good condition. The wound was now closed; he complained only of stinging sensations in the

wound.

He continued to improve slowly. On Oc-

tober 5 I noted that he still had some paralysis of the right limb, and was feeble.

October 7.—He now sat up for the first time since treatment. The right limb was weak. He had much dizziness. When dizzy, his pulse at several observations was between 44 and 50.

October 14.—Pulse 80. The vertigo and slow pulse have disappeared. He still has alterations of sensibility in both extremities, but less marked. He has also electric sensations shooting down from the sacrum to the toes, principally of the right extremity. He has some muscular tremors, chiefly of the right side. About this time, and afterwards. he exhibited exalted reflex action in both limbs.

For the next week he remained in the same condition, slowly improving, and no special

record was made.

October 22.—His pulse was very weak and irregular, and only 54. The right leg was cold. He now sat up for two hours at a time, but always felt weak after this, especially in the right leg. On the 25th he crept downstairs on his hands and feet. On the 27th he was able to walk about with fair strength. He was very emotional at this time, his character in this respect having been more or less altered since receiving the wound.

The patient has continued under observation up to the time of writing, January 17, 1879. He is steadily improving as to perception of sensation and motor power. ten days he complains that when he walks in the street, on bending his neck and body, he has pains shooting electrically down both extremities to the toes; while at rest he has nothing of this. His treatment now is counter-irritation and iodide of potassium.

I have endeavored to report this case closely, that you might discuss the subject freely, and also hoping that it might assist a little the investigators of the special subject of the physiology and the anatomical structure of the spinal cord.

Dr. Charles K. Mills said that he first saw the patient several weeks after the receipt of the injury, when he had recovered, to a certain extent, from the effects. Having studied the case, he was satisfied that the points had been well observed by Dr. O'Hara, and that it was a case of injury of the spinal cord, followed by approximate recovery. Persons having traumatic lesions of the spinal cord do sometimes recover, especially where there is a clean incised wound, as in the present case. The peculiar motor and sensory phenomena that have just been detailed are very interesting, and would be still more valuable if we could determine the exact extent and position of the section. Practically, the condition that persisted was that of paralysis of motion on the right side, and of sensation on the *left* below a certain point. It was stated that immediately after the injury there was

paralysis of motion on the same side as the external injury; but when the physician arrived this was on the right. According to the generally accepted ideas of the functions of the cord, in order to produce the symptoms reported, the section would be required to involve the right lateral half of the cord; but the external wound gave the impression that the injury was on the left side of the cord. which should have produced directly contrary The knife may, however, have entered obliquely and wounded the two posterior columns and the right lateral column. Recent observations of Wenoschiloff have shown that while the most important sensory fibres decussate throughout the entire length of the cord, each lateral column probably contains sensory fibres for both legs. Vulpian has also shown that, besides the motor decussation in the pyramids, there are also probably subsidiary decussations in the cord. These views might, perhaps, help to an explanation of some of the apparently impossible symptoms in the case under consider-

Dr. S. Weir Mitchell inquired, Upon what side was hyperæsthesia observed?

Dr. O'Hara.-On the right, and anæsthesia

appeared on the left.

Dr. Henry H. Smith observed that he had heard nothing said in the report of the case about any injury to the spinal membranes. This must have occurred, and if the meninges were wounded there must have been hemorrhage to a considerable extent, giving us symptoms of pressure upon the cord. The symptoms of pressure upon the cord. case is a curious one, and interested him especially, since he had at one time given particular attention to spinal injuries, and, in fact, had written his graduating thesis on the subject of the injuries of the spinal marrow (published in the Am. Jour. Med. Sciences, about 1837). In this he recorded a number of experiments made upon cats, with especial reference to determining the respiratory tract of Sir Charles Bell. He never saw a case, either in his experiments or as the result of accident, in which the meninges were cut without the occurrence of considerable hemorrhages that gave trouble afterwards. He was led to observe that probably some of the symptoms in the case presented might have been caused by hemorrhage and subsequent pressure on the cord or nerves.

Dr. S. Weir Mitchell.-During the war there were a number of cases of injuries of the spinal cord, in which hemorrhage caused some of the difficulties. He alluded to one case in which a bullet entered the spinal canal, penetrated the membranes, and lay immediately in contact with the cord. produced an extensive hemorrhage, running up and down between the membranes, and compressing almost the entire length of the cord, and causing symptoms that were difficult to define and classify. The post-mortem examination showed that the bullet did not press upon the cord at all; the symptoms were

all caused by the hemorrhage.

Dr. Mills had intended to refer to some of the symptoms being produced by injury to the membranes and hemorrhage, but, on the other hand, he believed that there were cases upon record of lesions of the cord in which the injuries to the membranes have been so slight as to cause very little trouble. In the present case he thought that the phenomena could not have been altogether explained by injury to the membranes and hemorrhage. In a case reported by Mr. Gowers in a recent number of the London Lancet, a man received a bullet-wound which involved one lateral half of the cord, the other half completely escap-This presented similar symptoms to Dr. O'Hara's case. He thought that the injury to the membranes might have caused some of the pain. The hemorrhage from an injury to the dura mater would probably have settled low down in the vertebral column, and would not have accounted well for some of the symptoms present. A knife-wound of the pia mater would almost of necessity, to a greater or less extent, have included the spinal cord.

Dr. Frank Woodbury inquired of Dr. Mitchell whether the rapid recovery of the case in the course of about two weeks was not in favor of the theory of hemorrhage rather than that of destructive lesion of the cord.

Dr. Mitchell said that in experiments upon the lower animals rapid recovery often follows clean cuts of the cord. He did not think that in the present case any absolute and perfect evidence existed of the cutting of the cord.

Dr. O'Hara inquired what would be the

symptoms of hemorrhage.

Dr. Mitchell said that the symptoms of hemorrhage into the vertebral canal in some cases are not positive, in others you have the signs of pressure and pain; much would depend on the amount of blood and the rate of bleeding. We lack thorough knowledge of

spinal hemorrhages.

Dr. Henry H. Smith said that hemorrhage of a very extensive character does occur from very slight injuries of the membranes. A small leak in the pia mater may make a circumscribed clot, or an inflammation might also lead to a limited exudation. These would produce identical symptoms, and in each case the object of the treatment would be to promote absorption. He believed sufficient attention had not been paid to the effects of injuries of the pia mater. A wound made by a knife may be sufficient to produce serious disturbance of the sensibility and motion, although temporary

Dr. O'Hara, in closing the discussion, said he could introduce his finger to a considerable depth into the wound, and could feel the bony laminæ between which it passed. He did not use the probe, but he had no doubt that the spinal marrow itself was injured primarily.

Localization of lesions in the brain,

Dr. Chas. K. Mills next read the paper of the evening, entitled "Notes on the Localization of Diseases of the Brain" (see page

The President, Dr. Henry H. Smith, questioned whether localization could be of much advantage to the surgeon, as he did not think an operation would alter the prognosis. Trephining the skull near an abscess of the brain would almost certainly be followed by fungus cerebri, which generally is fatal. Fungus cerebri is very often due to an abscess situated at a distant point pressing out the brain substance through an opening in the cranium.

Dr. Mills believed that a correct knowledge of the locality of an abscess might be of assistance to the surgeon, who could trephine immediately over it and evacuate it. He believed that one successful case of this kind had been reported besides those alluded to in this paper. It is well known that comparatively large portions of the brain may be lost without bad symptoms, approximate recoveries taking place. An operation might be beneficial in case of abscess, but it is more particularly of use in cases of compression. understanding of the symptoms of localized lesions might be of assistance in deciding upon the presence of what is known as counter-stroke by surgeons. It might be also that in some cases of hemorrhage or hydrocephalus an operation might be resorted to, and, at least temporarily, save the life of the patient.

Dr. Chas. B. Nancrede said that Dr. Detmold, of New York, had relieved a case of abscess of the brain by plunging a bistoury into the hemisphere, but the patient died soon afterwards. Dupuytren had in a similar manner opened a deep abscess in the hemispheres successfully, followed by recovery of the pa-

Dr. O'Hara mentioned a case of compression of the brain upon its convexity by an apoplectic effusion which was discovered after death. He believed that the patient's life might have been saved if he had been tre-

phined.

Dr. Henry H. Smith said the subject of brain injuries was a complicated one, and we have by no means arrived at a conclusion. Several years ago, in consultation with Dr. Anderson, he saw a case of depressed fracture of the skull of unusual character. The boy, who had always been idiotic, was about seven years old when he met with the following accident. His father, being a stone-mason, while repairing a chimney, accidentally let a large stone fall, which struck full on the child's head, producing a depressed fracture. He was unconscious for several hours, until he was trephined and the bone elevated, and sensibility returned. Fungus cerebri occurred, and he lost fully two wineglassfuls of brain substance: whether it was cortical substance

or not he could not say; but the child subsequently recovered and became a brighter boy. He was apparently an idiot because he had too much brain.

#### PATHOLOGICAL SOCIETY OF PHILA-DELPHIA.

THURSDAY EVENING, DECEMBER 26, 1878.

THE PRESIDENT, DR. H. LENOX HODGE, in the chair.

Hemorrhage into the right optic thalamus and small cyst in the right corpus striatum; also, in the same case, a large cyst in the left corpus striatum. Presented by Dr. Chas. K. MILLS.

P., æt. 55, female, nive years better coming under observation, Septem-ber 7, 1878, had an attack of rheumatism, but since had enjoyed good health, except frequent morning headaches, until August 27, 1878. On this day she felt weary and uneasy, and lay down to rest and compose herself. In about an hour, on attempting to rise, she found that her left arm and leg were stiff and helpless. She fell down; but I could not ascertain certainly whether or not she had been unconscious. She was put to bed, but in a few hours rallied, and was able to go around the house. She kept on her feet the most of the time between August 27 and September 7, but had pain and uncomfortable sensations in the head, and she would often stagger and occasionally fall.

On examination, her mind was found to be dull and inactive. The mouth was drawn very slightly to the right, but her face was not otherwise paralyzed. Her tongue was protruded without difficulty and without deflection; and the uvula and soft palate were not paralyzed. She had marked paralysis of the left upper extremity. She carried the fingers a little flexed, but they could be readily straightened. She had no grasping power in the left hand. The left lower extremity was also paralyzed, but was not as helpless as the corresponding arm. The limbs were not wasted. Farado-contractility was retained. She had control of her bowels, but her urine had frequently passed involuntarily since

August 27.

Diminution of sensibility was present in the leg, arm, and face of the paralyzed side. The anæsthesia was more decided in the face than in the arm and leg. Even the left side of the tongue showed loss of sensation.

She exhibited no hemiplegic symptoms and no anæsthesia of the right half of the body. Both the patient and her friends were sure that she had not had a stroke of palsy previous to August 27, 1878.

Her condition remained about the same

until September 15, when she had all the indications of a fresh apoplectic attack. She

became somnolent and semi-conscious, and had more or less muttering delirium. had some dysphagia and difficulty of breath-Her pulse was at first slow, but became rapid. All control of her bowels and bladder was lost. General muscular relaxation was present; but, by the resistance offered to passive movements, the helplessness, or motor paralysis, was found to be more marked on the left side. Anæsthesia of the left side seemed to be complete; but, owing to the overwhelming of the patient's faculties, the comparative sensibility of the two sides could not be thoroughly tested. On September 20 an acute bedsore began to form on the right buttock, afterwards going through the usual stages of an eschar from cerebral lesion. Conjugate deviation of the eyes and neck was a symptom observed in this case: the turning of the eyes was towards the right or non-paralyzed side.

The patient was kept as completely at rest as possible, a purgative was carefully administered, liquid nourishment was given, derivatives were used; but the efforts to save her life were without avail, as she died on the 2d of October. Her temperature on the two days preceding her death was as follows: September 30, in the morning, 99°; evening, 101½°. October 1, morning, 102.8°; evening,

103<sup>0</sup>.

A post-mortem examination was made seventeen hours after death. The skull was thin. The Pacchionian bodies projected very prominently. A large amount of serous fluid escaped on removing the brain. The pia mater, especially of the right hemisphere, was ædematous. The vessels of the circle of Willis and its branches were atheromatous; bluish-white plates were seen on their inner coats. The right middle cerebral artery in particular showed decided enlargement and degeneration of its walls. In the temporosphenoidal lobe, just below the horizontal branch of the right fissure of Sylvius, was a number of dilated vessels. The lateral ventricles contained a small amount of fluid.

A large recent hemorrhage occupied almost entirely the interior of the right optic thalamus, and had extended into the right crus cerebri. It had not, however, communicated with the lateral ventricle or striate body. The right corpus striatum, about the junction of its intra- and extra-ventricular divisions, contained a small, irregularly shaped old cyst about a quarter of an inch at its greatest length. The left corpus striatum had, centrally situated, a large cyst fully an inch in diameter, from which a considerable quantity of a light straw-colored fluid was discharged. Both cysts had smooth, yellowish walls. No other abnormal appearances were discovered

m the brain.

The anterior part of the upper lobe of the left lung showed a slightly emphysematous condition. Evidences of pericarditis and of

acute endo-arteritis of the aorta were present. The spleen was atrophied; it weighed 13 ounces. Both kidneys were contracted.

In this case a point of considerable interest was the presence of the large cyst in the left corpus striatum, without the production during life of paralytic symptoms on the opposite side of the body. As from the history of the case the left hemiplegia and hemianæsthesia were probably due to the hemorrhage into the right optic thalamus, the small cyst in the left corpus striatum had also apparently not caused hemiplegic symptoms. It is now held by some neurologists that lesions of the thalamus opticus and corpus striatum do not of themselves produce paralysis; that the symptoms which so often result are the effects of pressure exerted upon the internal capsule. The tissue destroyed by the cysts in the corpora striata was well removed from the surface of the ganglia; if they represented former hemorrhages, the clots were so situated and of such size as possibly not to have caused marked pressure-phenomena. The hemorrhage into the thalamus opticus was of such a character as to probably involve the internal capsule to a limited extent directly as well as by pressure.

In regard to the occurrence of lesions in both corpora striata, I might say that I have several times seen cysts or softening in one of the basal ganglia apparently formed subsequently to a lesion of the corresponding body upon the other side of the brain.

In connection with the case just given, I also present, without special remarks, a specimen of hemorrhagic cyst in the corpus striatum taken from another patient, simply stating that the case was under observation several months, and never presented hemiplegic symptoms.

Ćerebral hemorrhage, with hemiplegia and hemianæsthesia. By Dr. EDWARD T.

BRUEN.

Margaret M., æt. 42, was admitted to the Philadelphia Hospital, November II, 1878. She was unconscious, with stertorous breathing; her feet and face were noted to be ædematous.

Her husband, who accompanied her, said that several months previously she had been treated, in the Pennsylvania Hospital, for Bright's disease. He also stated that she had always been an intemperate woman, and on the day before admission he had found her, on the floor of her bedroom, intoxicated, but, after waiting a sufficient time for the effects of the liquor to pass away, he found that she was unable to speak or to move the right side, and that the stupor was accompanied by twitching of the extremities on the right side of the body.

She was first seen by me in the condition noted above; the pulse was 90, of good volume. The cardiac dulness was much increased, the heart evidently being hypertro-

phied; temperature, 983°. Urine was found to contain a large amount of albumen, with numerous hyaline and granular tube-casts and some fatty casts, the hyaline variety predomi-

nating; urine scanty in amount.

On the 16th she became conscious, and during the day her power of speech returned to a certain extent, for she was able to make her wants known. Temperature on the right side, 995°. It was noticed, however, that she did not give any evidence of sensation on the right side of the body, including the head and face.

The conjunctivate could be brushed with a piece of worsted without annoyance, if the worsted was introduced between the lids from the side of the patient, showing that she was not blind, because she closed the evelids if one attempted to introduce the worsted in front

of the cornea.

Dr. Shakespeare, ophthalmologist to the hospital, reported the retina as in normal condition. The facial paralysis was of the variety usually seen in hemiplegia; the eyelids could be opened and closed, and the brow wrinkled.

During the next two weeks the paralysis improved very materially in the leg, somewhat in the arm, and the power of speech was partially regained. Her intellect never became sufficiently clear to enable me to determine many points suggested by the case. Death occurred December 4, 1878.

Autopsy.—The lungs were normal; the heart hypertrophied; no pleural or pericardial effusion; no ascites; liver fatty; the kidneys weighed about two and a half ounces each, and were fatty and contracted. The examination of the brain disclosed a large clot, the size of an olive, situated at the junction of the anterior portion of the left optic thalamus and the posterior portion of the corpus striatum. The brain substance was destroyed at this point, but the main portion of the anterior part of the corpus striatum was not injured. The left ventricle contained a considerable amount of fluid blood and serum: the membranes of the brain were normal,

I would call the attention of the Society to the very great preponderance of symptoms of anæsthesia over those of hemiplegia, the former remaining always unchanged, though the paralysis became much less complete. The hemianæsthesia existed on the same side

as the paralysis.

It has been said by some authorities that in cases of hemianæsthesia with paralysis the vision is affected in regard to the power to differentiate colors, as in some hysterical persons the same phenomenon is observed.

The case might also suggest the application of metallic bands to the limbs, for it has been said that similar cases have been relieved by

It was impossible to work up these points in this instance, and I am aware that it is

rash to cite this case as illustrative of cerebral physiology, because death ensued before the disturbances of the circulation had fully subsided; at the same time, the case is of collateral importance, and may be of interest to those engaged in the study of clinical medicine, for, owing to the labors of Meyer and Ferrier, I was able to localize the lesion before the death of my patient.

(To be continued.)

#### REVIEWS AND BOOK NOTICES.

PHILOSOPHY: HISTORICAL AND CRITICAL. By André Lefèvre. With Introductory Chapter by the Translator, A. H. KEANE, B.A. Philadelphia, J. B. Lippincott & Co.

At the conclusion of a careful reading of this book we lay it down with a conviction that the most worthy pages to be found in it are those from the pen of Mr. Keane. introductory chapter is good: it is more than good,-it exhibits its writer as a man possessed of learning and apprehension balancing each other. We are made to feel that both are to be accepted as reliable,

To read the text of the book is to find one's self comparing, involuntarily, light wine and heavy beer,-is to be disappointed because of finding neither sparkle nor body. The text is, in truth, a kind of English opéra bouffe: lacking the high, it is deficient in the low;

God being absent, devil is wanting.

Concession is to be made to M. Lefèvre on the score of erudition. No one may doubt that he has read widely; but an excursion with him is found to lead to the "Que sçaisje?" of Montaigne, and to the "What matter?" of the author of the Traité des trois Vérités. One comes back having seen nothing, heard nothing, felt nothing.

We are not finding fault with M. Lefèvre without having comprehended him. A bald materialist, our author wears no wig. physics were the sum of the all, M. Lefèvre would be full; physics being the least of the

all, M. Lefèvre is empty.

A commendation justly to be given this book is that it is a very excellent epitome of philosophy. Had M. Lefèvre limited his aspirations to the work of a compiler, he would have deserved a meed of praise. Vaulting ambition, however, has overleaped itself: M. Lefèvre must set up for a philosopher himself, -not that kind of a philosopher defined by Pythagoras in answer to the query of Leontius, but the kind that presumes to consider itself a

maker of things.

We liken the showings of M. Lefèvre to the showings of a looking-glass: our author has a good surface, he reflects well, but, like a looking-glass, he is no maker of anything. With hidden, with internal things, M. Lefèvre has no relation of office. To pass from our

metaphor, M. Lefèvre has eyes with which to see, comprehension with which to comprehend, but in that Sense of Apprehension by and through which it is alone possible to know of God, he is utterly wanting. The Soul of the world he cannot take hold of. He is lacking in the *Like* by which alone like is recognizable. The metaphysics at which M. Lefèvre scouts would pronounce M. Lefèvre soulless.

Being, by his own showing, without other "Like" than that of the Iconoclast, it is amusing to watch the gropings of M. Lefèvre. Matter and Force are well: "Ohne Phosphor kein Gedanke" is indeed true. Phosphorus, however, is comprised in the subentities. Whence the subentities? M. Lefèvre resorts to a sub-reply. "Life," he says, "had a lowly origin, being born of the waters." Here, at any rate, one thing is explained; namely, man's affinity with the meerschaum.

The book, we consider, has as its object the ousting of God from his place in the universe. "It is alone the mind of a child," says M. Lefèvre, "that is satisfied when God is named as the cause of things;" but this he argues with such poor show of demonstration that we are not even prompted to review the theorems: we smile and turn away, pitying the man because of the weakness exhibited.

M. Lefèvre is decidedly lacking in the inner light. We have seldom read a man more lacking in it. Our author will never come to a knowledge of the "Spirit" of Diogenes. The "Mind" of Anaxagoras is for him less than an adumbration. The "Designer" of Socrates is to him a dæmon existing only in the imagination.

Vale, M. Lefèvre; go after Charron. Perhaps in Hades the priest will comprehend Gascon; perhaps in—in the somewhere, the physicist will apprehend Soul.

J. E. G.

On the Surgery of the Face. By Francis Mason, F.R.C.S. Being the Lettsomian Lectures delivered before the Council and Fellows of the Medical Society of London, Session 1877–78. Philadelphia: Lindsay & Blakiston, 1879; pp. 150.

If it were not the case that American surgery is peculiarly strong in its plastic department, this little book of our English brother would have better chance for a favorable reception on this side of the water. To send to America a work treating of cheiloplasty, genioplasty, and kindred subjects, is something like sending coals to Newcastle.

thing like sending coals to Newcastle.

Comparison of the book before us with American works of allied character makes it appear rudimentary and fragmentary. If the object of the Philadelphia publishers be other than to direct attention, by contrast, to the superiority of work done in this direction by our own authors, we may not commend the judgment that has risked the chances of the enterprise.

Regarding the diagrams contained in Mr. Mason's book, the less that is said about them the better. This fault, however, is much more likely to lie with publishers than with author. Comparing these diagrams with those found in the magnificently illustrated work of Prof. H. H. Smith, of Philadelphia, "Smith's Surgery," we find the difference not much less than that distinguishing fence sketches from portfolio performances.

In his little book of one hundred and fifty pages,—these octavo, but double-leaded,—Mr. Mason has essayed not only facial but oral surgery generally. In such an ambitious attempt, seconded by so little labor, failure, we think, was courted; failure has certainly been achieved.

#### GLEANINGS FROM EXCHANGES.

SUCCESSFUL TRANSPLANTATION OF A RAB-BIT'S CONJUNCTIVA TO THE HUMAN EYE FOR THE CURE OF SYMBLEPHARON.—Dr. A. W. Calhoun reports the following case (Southern Practitioner, January, 1879). The symblepharon was of many years' standing,—the result of an accident in early childhood. The patient being chloroformed, the lower evelid was separated from the ball from the inner to the outer canthus, the incisions extending as far down as the point at which the lower conjunctival fold should naturally be found. At the same time the outer canthus was slit up, so as to make the palpebral fissure of the same length. This left the whole inner side of the lid and the opposing portion of the ball in the condition of two large contiguous wounded surfaces. After bleeding had entirely ceased, the conjunctiva of a large white rabbit, ready at hand for the purpose, was carefully dissected off the upper lid and part of the sclerotic, and, being washed in warm water, was applied to the wounded surface in the patient's eye and carefully stitched in place. A bandage was placed over the eye, and the wound disturbed as little as possible. By the sixth day the bit of rabbit's conjunctiva had adhered, except about the edges. The lid was separated from the ball, and was quite movable in all directions. Later, an artificial eye was placed in position and worn with great ease.

SPINA BIFIDA CURED BY IODINE INJECTION.—Dr. Geo. W. Thompson reports (British Medical Journal, November 30, 1878) the case of an infant having a spina bifida situated over the first and second lumbar vertebræ. It measured about twelve inches in circumference, with a pedicle about two inches by one inch. It was said to have increased greatly since birth, being then only the size of a common marble. The child was ten days old. The skin covering the tumor was as thin as membrane; some strands resembling nerve-cords could be seen by trans-

mitted light. Pain was caused by pressure. The sphincter ani was paralyzed, allowing the fæces constantly to trickle away; the feet were movable. On pressing the finger firmly into the root of the tumor on its upper surface, an opening in the spinal column. large enough to nearly admit the point of the finger, could be felt directly over the spot where the usual spinous processes should have been, one of which seemed wanting. Operation was performed by withdrawing two ounces of serum and injecting the following mixture, as recommended by Dr. Morton, of Glasgow: Iodine, gr. x; iodide of potassium, gr. xxx; dissolved in 3i of glycerin. This was repeated twice, at intervals of about a week, and with the result of a complete cure.

PLASTER-OF-PARIS BANDAGES .-- Mr. D. S. Bent, in a communication to the editor of the Medical Record, calls attention as follows to a new variety of cloth for the plaster-of-Paris bandage, and to a new way of cutting the same. It is superior to the thin muslin or crinoline, and is known in the trade by the name of "cheese-cloth." Its meshes are finer than that of the crinoline; and, as no starch or dressing is used in its manufacture, the fuzz of the thread in the mesh is sufficient to retain the dry plaster without loosing the same. prepare it in rollers, the most convenient way is to take a whole piece (sixty yards in length) in which the end tags have not been removed, to any bookbinder's or printer's where they have a large *lever paper-cutter*, and get the cloth cut into strips of the proper width for rollers. Ten minutes' time will suffice for this, at an expense of about twenty-five cents. The strips are then ready to be cut off into the required length for rollers, and as the cloth is folded in yard folds, this is an easy matter. The sixty yards will make over a hundred five-yard rollers, and not the slightest drawing of the thread will be observed.

Cæsarean Section — Recovery. — Surgeon-Major T. Cody reports (Lancet, December 21, 1878) the case of a woman, without sensible external deformity, who had previously given birth to two children without difficulty, in whom labor was impeded by exostoses growing from the inner side of the rami of the pubes. Cæsarean section was undertaken and successfully performed, resulting in the birth of a healthy child, with complete subsequent recovery on the part of the mother.

CURE OF A SPINA BIFIDA BY THE ELASTIC LIGATURE.—Dr. Cavagnis, of the Bergamo Hospital, relates (Annali Universali, July) the case of an infant twenty-four days old brought to him with a spina bifida, two-thirds the size of an egg, situated in the lumbar region. He passed an elastic tube four millimetres in diameter twice round the base of the tumor, with a moderate amount of constriction. In two days the constriction was greatly increased. The tumor became at first violaceous, and then pale and flaccid, its apex

ulcerating. On the fourth day the tubing was removed. Three days later the child returned to the country, an ordinary ulceration occupying the place of the former tumor. The healing of this was soon completed, and a report of the case fifteen months later represented the cure as complete, only a slight de-

pression being visible. CARBOLIC ACID INHALATION.—The inhalation of carbolic-acid spray (two per cent. solution) in phthisis has been tried in the Mount Sinai Hospital, New York. The first case had fetid expectoration, with an average temperature of 102%. The first effect of the inhalation was to increase to a marked extent the sputa, but at the same time to check the fetor. The most important effect of the inhalations was to decrease the temperature from 102½° to 101°, 100½°, and 99°. In some of the cases carbolic acid acted as an irritant, giving rise to considerable spasmodic effects, and in these cases salicylic acid was substituted. The latter agent did not produce such a decided effect on the temperature, but its action on the fetor was equally marked.

ALTHOUGH we are among those who

"Never use a big, big D,"

at least, hardly ever, yet if there ever has been a time when we were strongly inclined so to do it has been when we have pried open the corrugated folds of our esteemed contemporary, the British Medical Journal, and endeavored to hastily skim its uncut pages. All this bother is now done away with, for since the first of the year our valuable exchange has reached us with nicely trimmed edges and sufficiently pliable paper. Besides this, the "British Medical" is now printed upon white paper, which will be considered an improvement by many.

#### OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY FROM FEBRUARY 9 TO FEBRUARY 22, 1879.

Notson, Wm. M., Major and Surgeon.—To report in person to the President of the Army Medical Board, now in session in New York City, for temporary duty as a member of the Board. S. O. 38, A. G. O., February 15, 1879.

KINSMAN, J. H., CAPTAIN AND ASSISTANT-SURGEON.—His extension of leave of absence granted December 23, 1878, from Headquarters Division of the Atlantic, further extended one month. S. O. 36, A. G. O., February 13, 1879.

LAUDERDALE, J. V., CAPTAIN AND ASSISTANT-SURGEON.— To report in person to Commanding General, Department of the South, for assignment to duty. S. O. 33, A. G. O., February 10, 1879.

BIART, V., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—
Relieved from duty at Fort Leavenworth, Kansas, to accompany Companies A, C, D, G, and K, 23d Infantry, to their new station (a point on the south side of the North Fork of the Canadian), and remain on duty with them as medical officer of the new post. S. O. 32, Department of the Missouri, February 15, 1879.

LA GARDE, L. A., FIRST-LIEUTENANT AND ASSISTANT-SUR-GEON.—Granted leave of absence for fifteen days. S. O. 26, Department of the East, February 18, 1879.

## PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, MARCH 15, 1870.

#### ORIGINAL LECTURES

#### ABSTRACT OF A LECTURE ON A CASE OF IDIOPATHIC TETANUS

BY HORATIO C. WOOD, M.D.,

Professor of Materia Medica, and Clinical Professor of Diseases of the Nervous System, in the University of Pennsylvania.

Reported by W. Hobson Heath, ex-Resident Physician University Hospital, Resident Physician Philadelphia Hospital.

ENTLEMEN,—The patient whom I bring before you to-day comes with the following history, prepared by Dr. Heath:

"Six days ago, preceded by several days of indisposition, he first noticed a slight difficulty in opening his jaws, a feeling of exhaustion in them, 'as though he had been using them too much.' This was shortly followed by a similar feeling in knee- and elbow-joints, and of an intense pain, of a piercing character, which he locates at about the ensiform cartilage, penetrating through to the spinal column, and thence radiating up and down the back, as high as the neck and as low down as the limbs. He says that all these symptoms and pains grow worse at different times during the day, and that his body, in spells of this kind, bends backwards. These exacerbations became most marked three days ago, when he

had as many as six or eight.

"By trade he is a machinist, and of late has been working in damp and wet paper-mills. No clear history of traumatism, but four weeks ago he had a slight bruise and abrasion over elbow, which is now entirely healed. Health always good, but habits bad, being very intemperate. No family history. On admission, general appearance good. Muscular system well developed, but on examination found to be very rigid over abdomen, legs, and back; masseter muscles especially affected, so that he cannot open the mouth beyond half an inch. There was pain on pressure over epigastric region; the abdomen was tympanitic. There was no tenderness over the spinal column; the tongue was coated, dark, and dry; the intellect clear, but apathetic. There was no headache, and the convulsions were not very severe, but accompanied with decided and opisthotonous persistent rigidity. pupils were normal, and revealed to the ophthalmoscope nothing indicating any cerebral or meningeal trouble."

The diagnosis of the present case is sufficiently clear not to need elaborate discussion, but I would like to call your attention to some of the symptoms in a little detail,

-to some symptoms not always thought of in connection with tetanus. The first is abdominal pain, which is usually located at or about the epigastrium, or, as in the present case, is referred to the ensiform cartilage. This pain, at first slight, rapidly increases and seizes the entire abdominal Often it seems to be the centre region. from which radiate to the back and up and down to the extremities excruciating Our patient complains of it chiefly. It is somewhat obscure in origin, but is probably due to spasm of the diaphragm.

Again, I would call your attention to the fact that the unstriated muscular system is frequently implicated in tetanus along with the voluntary muscles, and as a result of this there is inability to empty the bladder and obstinate constipation on the part of the patient. In our present case both these symptoms have been very

marked.

A third point to direct your minds to is the fact that the convulsions are usually. I may say always to some extent, accompanied by a rise of temperature, which is peculiar to this disease, and different from febrile temperature, in that it presents no evening exacerbation or morning remission. If you look at the temperaturesheet of a case of tetanus, taken every hour, it appears like the teeth of a saw. and if you compared it with the record of convulsions you would find that each exacerbation corresponds to a convulsion. Now, what is the cause of this rise of temperature? Evidently it is due in part or in whole to the muscular action, for it has been distinctly proven that in direct proportion to muscular activity there is increased production of heat. I believe. however, that there is another factor or other factors entering into the causation of this temperature rise.

If you take an animal and irritate a peripheral nerve, an impression is produced which results in a movement at a distal extremity, and you have what is known as a reflex action. Now, in tetanus, if you irritate a peripheral nerve, instead of obtaining as a result a simple reflex action, you get a violent convulsion all over the body. What is the cause of Probably there is, in tetanus, an excitable state of all the centres of the cord, and every little cell is ready to receive an impression and give an explosion. Almost certainly, however, this is not the whole pathology. The normal cord is so constructed that a peripheral impulse does not spread throughout it, but expends its power in generating a single reflex act. In the tetanic cord it would seem either that the nerve-paths are in such a state that impulses play over them at will, or that inhibitory centres which our present physiology seems to show are scattered through the cord to check irregular transmission and generation of impulses are paralyzed. Consequently every impression is morbidly transmitted, and every motor centre, morbidly reacting to these impulses, radiates them out over the whole cord, and a convulsion instead of a simple reflex action It is probable that in tetanus, as in strychnia-poisoning, the vaso-motor centres of the cord suffer, with its other motor cells, from the same excessive susceptibility, the same ungoverned spread of a travelling impulse.

A reflex action in health is not attended by a general vaso-motor spasm, because the cord in itself cannot produce other than local reflex vaso-motor spasms, precisely as it cannot produce any by local voluntary reflexes. In strychnia-poisoning, new channels are, as it were, opened, and impressions are not only more easily and frequently transmitted, but beyond to where they are in health, and other than normal results follow. Is it not allowable to compare this to the process following occlusion of a main artery in a limb, whereby the blood opens for itself new passages which are not in health so utilized, and a collateral circulation is established? be that in tetanus new conducting paths, until then dormant, are opened, and the impressions are conveyed not only to the vaso-motor centre at the base of the brain. but are also distributed to the centres along the cord. As a result you have reflex vasomotor spasm accompanying spasm of the muscles, and every curve on the temperature-sheet may be evidence not only of a convulsion, but also of vaso-motor spasm.

That vaso-motor spasm has a marked influence on temperature I am satisfied of. In a series of experiments I have been engaged in lately, I have found that the bodily temperature is not an indication of the production of heat; that you may have a high temperature while the production of heat is low, and, on the other hand, a

low temperature when the production is large, and that the bodily temperature is a question of relation between production and retention rather than of production. Vaso-motor spasm means that the blood, instead of being diffused over the surface of the body through the arterioles and capillaries to radiate off its heat, is, by the narrowing of them, driven internally and retained. It is plain also that in the convulsions of tetanus the blood is mechanically forced not to the surface but to the interior of the body, to the viscera, where no muscular storm rages.

In tetanus, therefore, the convulsive rise of temperature is probably due to these two factors, viz., increased production of heat by muscular activity, and retention of heat by interference with exterior circu-

lation.

After death a characteristic and most interesting feature of tetanus is an instant or very early development of rigor mortis; often it is from life spasm to death spasm, "in death as in life." This is not an essential phenomenon to this disease, but an accidental one. It is due to the overhasty coagulation of the albuminous substance known as myosin, which exists in muscular tissue, and always coagulates after death, sooner or later producing post-mortem rigidity. The sudden occurrence after death of post-mortem rigidity has been observed in many other conditions than tetanus, and is especially apt to occur where the muscles have been undergoing great or unusual activity. To sportsmen it is familiar after the chase, resulting in death to the rabbit, the animal killed after a long run stiffening as it rolls over and over after the fatal shot. On the battle-field, after a fight, soldiers have been seen in the various positions of life, rigid in death, with even the last expression of hate, rage, or prayer upon their faces, just as they were when struck by the fatal ball. The cause evidently is some alteration wrought in myosin by excessive exertion. found that a lower temperature is required to produce immediate coagulation in myosin obtained directly from an exercised muscle than is normal, and that, on the other hand, the myosin squeezed out of the muscle enduring the long rest of hibernation resists coagulation much more successfully than does the normal principle, i.e., that obtained from a muscle in full life and not excessively exercised.

It is frequently affirmed that, with all our improvements, we have not really made any gain in the therapeusis of tetanus. I do not believe this at all. We would have gained more than we have if surgeons, who generally treat this disorder, were more generally acquainted with the great principles of medical therapeusis as well as they are with those of surgical treatment. What guiding principles are we then to apply? In the first place, it is to be borne in mind that tetanus is not a disease with a definite course to run, like the acute specific fevers; on the contrary, its duration is very variable.

I have often said to you that the treatment of all diseases depends largely upon the manner in which death is brought about. Now, in tetanus death occurs in two different ways. In the first place, the patient may die of acute suffocation during a paroxysm of great intensity and duration, in which the muscles of respiration are rigidly contracted and hold the lungs as in a vice, preventing their expansion. In the second place, he may die of exhaustion; and this is the most frequent cause of death. The continuous rigidity of the muscles of the jaw and pharynx renders mastication generally impossible and deglutition very frequently difficult, which interferes very much with and sometimes entirely suspends nutrition. This, together with the great wear and tear consequent upon the intense muscular exertion, rapidly carries the patient to a fatal end; and in all cases of tetanus the tendency therefore is to exhaustion. This can never be too strongly insisted on. It is by interference with the nutrition and by exhausting the forces of the patient that tetanus kills in the great majority of cases. The feeding of the patient is even more important than the administration of any drugs; and every grain of food that can be digested by the patient should be given him.

The treatment generally, and the feeding especially, should be systematic. You all know that when we want to fatten an animal we feed often, at short intervals; and so it is in tetanus; the patient should be fed every hour during the day and every three hours during the night, if he sleeps, but if awake, from any cause, advantage should be taken of his wakefulness.

In most cases solid food must be avoided, for, should a patient have a piece of meat

or bolus of solid food in his pharynx, and a convulsion come on, you can see the great danger of choking to death. Again. the passage of the bolus itself might bring on an attack. It is plain that it is impossible for the patient to chew food, and unchewed solids require much power for digestion, whereas the greatest amount of result with the least expenditure of force is what is wanted. Generally, however, the teeth are so tightly clenched together that there is no danger of getting any solid food into the mouth. When from such cause there is decided interference with the ingestion of liquids, it is necessary at once to extract teeth or force a passage in other mechanical way. The best diet is composed chiefly of milk and eggs, with the lean of flesh in some form. The best preparation of flesh is scraped raw meat: with milk and eggs, it should be the basement of your treatment. I cannot recommend this too highly, as one of the best and most nutritious articles we can use. may be made by bruising meat in a mortar. but a better plan is as follows. Lay a slice of the round of beef upon a firm board, and scrape it laboriously with a dull caseknife until you get out of it all of the red pulp it will yield. This, mixed with brandy and sugar, is not unpalatable to most per-In using eggs it should never be forgotten that they are much more digestible raw than cooked, and that in all cases of systematic feeding they are to be given raw, diffused in milk, or partially cooked in mulled wine, or as an unbroken whole in ordinary wine.

Just here is a very important point, namely, the use of alcohol. In tetanus this agent should be used in moderation from the very beginning of the disease, not so much for its general as for its local action, i.e., not so much to stimulate the system as the stomach: to enable the latter viscus to digest the utmost possible amount of nutriment, rum, brandy, whisky, or wine, in small amounts, should be given with every particle of food going into the stomach.

Alcohol, you see, does not come in here as a stimulant, but as a food and as an aid to the digestion of food,—to prevent tissue-changes, and to whip up the stomach. After feeding to keep up the strength, our attention is to be directed to lessening the severity of the convulsions, i.e., the strain or drain upon the strength. Of the first importance are absolute quiet and avoid-

ance of excitement. You want, then, a good nurse, not one who fusses, but one who knows just how much and when to do. Only this nurse and the medical attendant should have access to the room, which should be a quiet one, removed from the family,—a back one, away from the noise of the street, and kept darkened. Carpet slippers should also be worn by the nurse or attendant, and no intrusion or disturb-

ing the patient allowed.

In regard to the all-important question of medical treatment, there are several generalizations you should not forget. is not, as you might think from reading the journals, a question of whether systematic feeding gives better results than drugs, or whether this remedy is superior to that, but it is what combination of treatment is best for the patient. Remember, also, that susceptibility to the action of neurotics is always rapidly lessened in disease, and hence that in a protracted tetanus it is essential to vary the treatment; also that better results very frequently follow the combined use of remedies than their separate employment. It is also necessary for us to have as clear an idea as possible of what we intend to do. There is still much uncertainty as to the nature or ultimate pathology of tetanus, and until this is cleared up we cannot be certain how far drugs are absolutely curative, or whether the only good to be got from them is to keep the patient alive until the disease spontaneously subsides.

The present drift of evidence indicates that there is hyperfunctional excitement of the cord, and that certain remedies, such as bromide of potassium and Calabar bean, are of real curative value, by their tendency to reduce or lower this functional excitement. These same agents, however, subserve other purposes than this in the treatment of the disease; and let us not press farther their direct curative action.

The value of an agent which will keep off the convulsions in tetanus as a means of preventing fatal exhaustion or death from tetanic asphyxia is clear. If we could subdue all convulsions, in the majority of cases death would be averted. The agents which we have for use are, first, those that act continuously,—opium, bromide of potassium, chloral, Calabar bean, woorara [tobacco, aconite, veratrum viride]; second, those which act quickly and briefly,—the anæsthetics, nitrite of amyl.

The remedies of the first class which are printed in brackets are not available, because they exert such other actions than as mere anti-convulsants upon the system as to render them dangerous. Let us pass them by. Without much discussion, the relative therapeutic use of the two classes seems clear. Those of the first set must be the stand-bys, whilst those of the second are to be employed as adjuvants whenever the convulsions are so violent that immediate necessity exists for subduing them. In the height of the disorder these remedies are invaluable; they should always be sitting upon the table, under the supervision of an attendant sufficiently instructed to employ them. And you should always remember that chloroform is much more efficient than ether, but far more dangerous; that nitrite of amvl is less dangerous, and at first even more efficient. than chloroform, but that, according to my experience, patients get rapidly accustomed to it.

In attempting to select or arrange the various spinal depressants at our command. one general principle at once suggests itself, namely, that sleep is a necessity to endurance, and the proper time for sleep is night. It is obvious from this that those drugs which act as soporifics as well as spinal depressants are to be especially employed at night, and that if there be any fear of undue tolerance to them being set up, they should be reserved for night use. Hence it would seem wisest always to press chloral and opium as night approaches. The well-assured value of opium in this affection probably rests very largely in its power of subduing pain, and its employment, it seems to me, should be dominated by the condition of the patient as to sleep and pain. Bromide of potassium in sufficient dose is certainly very efficient in controlling spasm; its influence on the system, when set up, is more permanent than that of either chloral or opium, and, according to my thinking, it is well to employ it always as the underswell, so to speak, of the treatment, giving it through the day, pushing chloral and opium at night, and employing nitrite of amyl and chloroform when there are exacerbations of the disorder.

In using the drugs mentioned it must always be borne in mind that only heroic doses are of any avail. An ounce of bromide of potassium a day is without risk, but with chloral and the anæsthetics there is some danger from very large doses. The taking of risk is, however, abundantly justified, and forty grains of chloral with a half grain of morphia make a very efficient sleeping-draught, which may even be repeated in an hour under some circumstances.

The principles which I have attempted to outline to you are those upon which the patient before you has been treated; and so far the result has been excellent.

#### ORIGINAL COMMUNICATIONS.

THE ADAPTABLE POROUS SPINAL JACKET, AND ITS MODE OF APPLICATION TO CASES OF POTT'S DISEASE AND LATERAL CURVATURE.

BY BENJAMIN LEE, M.D.,

Chairman of Committee on Hygiene, etc., Philadelphia County Medical Society.

Read before the Philadelphia County Medical Society, February 12, 1879.

MR. PRESIDENT AND GENTLE-MEN,-The frame which I have caused to be erected, in order to demonstrate the mode of application of the porous felt jacket in cases of spinal curvature, before you this evening, is the same that I used before the Medical Society of the State of Pennsylvania, in the lecture-room of this building, in the year 1870, in order to prove the feasibility of self-suspension as a means of treating this class of diseases. At that time (I say it without the slightest hazard of contradiction) no physician, either in America or Great Britain, was making use of suspension, and none, anywhere, was making use of self-suspension, as a therapeutic means.

Subsequently, at the meeting of the American Medical Association, in this city, in the year 1876, I placed the same frame at the disposal of Dr. Lewis A. Sayre, of New York, in order that he might demonstrate his brilliant discovery of the application of the plaster-of-Paris bandage to the treatment of caries of the

spine.

In connection, therefore, with the present tendency of development in the management of these diseases, it possesses a certain degree of historical interest. It is, as you see, a simple upright frame,

consisting of two side-pieces and a crosspiece, into the middle of the latter of which a strong hook is securely screwed. On this hook is hung a simple pulley, over which runs the rope by which the patient is suspended. As I shall have occasion to say subsequently, however, the frame itself is not ordinarily a necessary adjunct.

The patient whom I take the liberty of introducing to your notice, a lad 13 years of age, was placed under my care some four years since, for an affection of the spine with great deformity, considerably more than you observe at the present time. On giving him a careful examination, however, I discovered that his sufferings and loss of health at that time were due not so much to the spinal affection as to disease of the right hip-joint, in which suppuration had already taken place. I at once applied a long splint, with the effect of immediate relief of pain, diminution of fever, and general improvement, so that from having been unable to turn in bed he could, in a few days, stand up with perfect comfort. The pus, however, found its way to the surface, discharging, at the upper third of the thigh, anteriorly. mention this fact in his history, as explaining his lameness. There is no disease at present in the joint, and he carries his crutch, I am satisfied, rather as a matter of habit than as a necessity.

The idea of the porous felt jacket is essentially the same as that of Dr. Sayre's plaster cuirass, with this difference,—that his is a fixed dressing, while mine is a

movable one.

I confess that from the first I have not been an enthusiast in regard to the plaster jacket. While recognizing the value of the principle on which it depended, I have felt that in practice it was open to very serious objections. Among these are:

ist. Its weight. I shall show you that in this respect, while possessing even greater firmness, the felt jacket has a great superiority, in being comparatively light.

2d. Its impermeability, preventing at once the escape of the exhalations from the body and entrance of air to the skin, thus defeating two most important provisions of nature for maintaining the cutaneous covering of the trunk in a healthy condition. The material of which this jacket is made, which I will now remove from the patient and pass around for inspection, is so porous that smoke may be

blown through it by the mouth. It can therefore offer no obstacle to the escape of the perspiration or to penetration of the The objection to the plaster-of-Paris dressing, on this score, holds with equal force against the silicate of soda, the paraffin, the glue and zinc dressing of Dr. Levis, or any other similar substance applied in this way.

3d. Its absolute rigidity and want of adaptability. The porous felt jacket is susceptible of a certain amount of adjustment, by means of the lacing in front, and, what is of greater importance, can be altered by heat so as to adapt itself, with the greatest accuracy, to the variations and improvements which take place in the patient's form.

4th. Its liability to crack, peel, and pulverize, thus losing its supporting value and, at the same time, proving a constant source of annoyance to the patient by the dirt which it makes. The felt jacket always remains firm, will last as long as the patient needs to use it, and is perfectly

clean.

I will now cause the patient to suspend himself. As you observe, he draws himself up with great ease, and swings free of the floor (Fig. 1). From the end of the suspension-rope hangs a steel bow carrying a double head-band, one strap going under the chin and the other under the occiput. The rope to which it is attached, passing through the pulley above, is grasped by the hands of the patient, by means of the wooden ovals, which are placed at any required height by knotting the rope. simple pulley only is used. The objection to the compound pulley used by Dr. Sayre is that in self-suspension the rope may foul, and the patient, unable to extricate himself, be permanently hung. When the plaster jacket is to be applied, the weight of the body is taken partly off from the head and neck by axillary bands taking their attachment from the steel bow above the head. The desired amount of extension is then made by drawing down on the rope until the patient is nearly or quite lifted from the floor. The end of the rope being now securely fastened to one of the uprights, the dressing may be applied. If it is intended to apply a plaster-of-Paris or silicate-of-soda jacket, it is necessary that the patient should have on his body only a closely fitting gauze undershirt, without sleeves; it should be "skin-tight," in the

words of Dr. Savre. Over this the prepared crinoline-bandage is passed, if plaster is to be used. The crinoline which I have found to be best adapted to the purpose is known as the "International;" it has a firm, even mesh, is tough, but not stiff. The bandages are three inches wide. Freshly calcined plaster is dusted into them as they are rolled, which should be loosely done. When they are needed, they are



Self-suspension by means of Dr. Lee's spinal swing.

set up on end in a bucket of warm water. and, as soon as all the bubbles of air have escaped, they are ready to be applied. In case silicate of soda is to be used instead of plaster, either crinoline or unbleachedmuslin bandages are to be employed, the latter being rather the best. The solution of silicate of soda is a clear liquid, specific gravity 1024, and the consistency of oil.

It may be obtained from Bullock & Crenshaw, and many of the retail druggists. It is applied to the successive layers of bandage by means of a small, flat paintbrush. In order not to protract the suspension unnecessarily, there should be at least two operators, one to apply the bandage, the other to follow up the first instantly with the brush. The strength of the apparatus may be reinforced by placing these strips of tin vertically between the layers of bandage as it is put on. These strips have holes punched in them on one side, leaving a burr on the other side, which produce irregularities upon their surface, and prevent them from working their way out of the bandage, and the band-



The adaptable porous jacket in lateral curvature—Case of Miss E. S.—Back view.

age from slipping out of place while wet. Before the dressing is commenced, prominent points, such as the spinous processes of the ilium, must be protected by little pads like these, which are afterwards removed, and a layer of wadding or an airpad is placed upon the abdomen, to allow for its changes in volume, in respiration and digestion.

When I first tried to apply the porous felt directly to the body, after softening it by heat, I found that there was great difficulty in avoiding wrinkling, and also that the heat was very disagreeable both to my hands and to the patient's body. As the

result of my experiments, I have now adopted the plan of first applying a plaster or silica jacket in the way described. When this is perfectly dry, it is cut accurately down the front, removed from the patient, and sent to the factory, where it is used as a mould to form a plaster model of the patient (Fig. 2). Upon this cast the felt jacket is shaped. This one is, as you see, an exact reproduction of the body of the patient here to-night. The adaptable porous spinal jacket opens down the front, and is ordinarily fastened by a lacing and a double row of hooks. Of all forms of spinal supports the plaster jacket is the heaviest. I have here a silica jacket, kindly sent me by Dr. Coover, of Harris-



The adaptable porous jacket in lateral curvature—Case of Miss E. S.—Front view.

burg, which I find weighs two pounds. The felt jacket which this patient is now wearing weighs only one pound. I have also here a steel spinal brace, which the boy formerly wore, which weighs one and a quarter pounds.

To show that there is an actual extension maintained by this apparatus, I will now measure the boy's height in your presence, and then apply the jacket in suspension. It is found that he has actually gained one and a quarter inches in height. It has been objected to this form of suspension, that the strain upon the cervical ligaments is very great, and might possibly be inju-

rious. I can only say that I have used it daily now for upwards of ten years, in adults as well as children, and in cases of disease of the cervical vertebræ as well as low down in the spine, in all varieties of Pott's disease and lateral curvature, and have never yet seen a bad result. The only effect I have noticed in spinal caries, especially in little children, is that after the first fright is overcome the great feeling of relief from pain, which is caused by the extension separating the ulcerated surfaces of the vertebræ, leads the patient instinctively to make traction and practise self-suspension. The relief that has been given in many cases, simply by the practice of self-suspension for a short time, five or ten minutes daily, has been most surprising.

In order to use suspension for the treatment of cases such as have been referred to, it is not necessary to have an elaborate apparatus; all that is necessary is a stout hook that can be fastened to a joist in the ceiling or over the top of a doorway, through which a clothes-line may be passed, two simple straps being used for a head-sling, one passing under the chin and the other around the occiput. I easily hold the whole apparatus, as you see, in one hand. It is not necessary to have these wooden ovals on the rope, but it is very convenient for the grasp, and they are inexpensive. In cases of lateral curvature or lateral deviation in angular curvature they are very useful, one being placed at a higher level than the other, and the hand corresponding to the concavity of the spine (or, where the curvature is sigmoid, to the greater concavity) being placed higher than the other, the curve is gradually unbent at the same time that the muscles are strengthened by systematic exercise.

CASE OF DEATH FROM A MIX-TURE OF ETHER AND CHLORO-FORM.

> REPORTED BY P. J. A. CLEARY, Assistant-Surgeon, U.S.A.

PRIVATE H. D. B., Company H, Nine-teenth Infantry, age about 33, large and robust, addicted to liquor, was admitted to hospital, December 3, 1878, suffering with an injury of middle finger, right hand, resulting in gangrene of the second and third phalanges, and in consequence it was decided to amputate at the metacarpal articulation. For this purpose a mixture of equal parts of ether

fort, and chloroform was administered. About ten minutes previously, two ounces of whisky were given. I examined his heart, and found

it normal in every respect.

The anæsthetic was administered on a piece of lint covered with a small towel, held square in contradistinction to cone-shaped. I per-sonally administered the mixture, while the steward observed his pulse. The cloth was held so as to allow a free admixture of air. He inhaled freely. About two drachms were first poured on the cloth, but had no apparent effect. Shortly after, about the same quantity was poured on; he observed that "he did not feel it." After a time, about the same quantity was again poured on, and, as I turned to look at some instruments, he requested me not to begin yet to cut him. A further quantity was now poured on the cloth, when he began to laugh; this was followed by attempts to articulate, then, as is common, by strong gesticulations of his arms, to stop which the steward forcibly pressed down one arm, holding him by the wrist, while an attendant did likewise with the other. He was now passing to a state of unconsciousness, and in reply to my inquiry the steward said he could not feel the pulse, but added that his arm was somewhat twisted, which prevented his perceiving the pulse. I therefore felt for the pulse at the other wrist, but could not perceive it. Just as I felt, the muscles of his arm and neck, which had been strongly in action, suddenly relaxed: his breathing, however, was very good, and such as would in no wise have attracted attention. At once I removed the anæsthetic and dashed some cold water in his face. pulse did not return. He continued to breathe freely for a little time longer, then his breathing became labored, and then suddenly stopped. The action of the heart had previously stopped, and the man was dead. will add that everything I ever heard of, saw, or read, appropriate for such cases, was done, but to no effect. The mixture consisted of chloroform and ether fortior; amount used, exactly one ounce; time in using it, fifteen minutes. Cause of death, paralysis of heart.

Of the entire amount used, one-half only was chloroform, *i.e.*, half an ounce. Of this amount a large proportion was wasted over the cloth, and which he never inhaled; the inhalation of the remainder occupied fully fif-

teen minutes.

SPONTANEOUS COMBUSTION. — Dr. Atkinson, in the course of an article on "The Treatment of Alcoholism," in the *Practitioner* for January, says, "To show to what extent alcohol may be present in the blood, I may mention I have known it to burst into flame on a light being applied to a cut head, and Professor Ogston, of Aberdeen, has told me he has been able to set it alight when he has cut open the bladder of a man who has died in a fit of alcoholism,"

#### TRANSLATIONS.

HEREDITARY BONE-SYPHILIS-MULTIPLE SPONTANEOUS FRACTURES AND PSEUDO-PARALYSES OF THE LOWER LIMBS AS A RE-SULT OF THE FRACTURES.—Polaillon (Cbl. f. Chir., No. 4, 1870; from Bull, de la Soc. de Chir.) tells of a woman of 21, who had suffered, since her second month of pregnancy, with flat condylomata, who gave birth to a child at full term, and spontaneously. This child showed a fracture of the left humerus, upper third, a paresis of the right arm, as well as of both the lower extremities, though to a less degree. The bones about the elbows, and also the whole of the left femur, were thickened. Pressure on the affected parts was painful. No other external sign of syphilis was present. The child died in eight days, of intestinal catarrh. Postmortem examination showed fracture near the upper end of the left humerus, with dislocation of the upper fragments, without the formation of callus, except a thickening of the periosteum. Fracture of the right humerus at the same point, without tearing of the periosteum and dislocation. Both fractures were respectively nine and eleven millimetres from the epiphyseal car-The right femur was one-half centimetre longer than the left. The latter was of decidedly smaller volume in several places. There was a transverse fracture of the left femur, without dislocation, about five centimetres below the epiphyseal cartilage. In the right femur there was a fracture near the upper end. Various enlargements were found on the other bones, with porotic condition in places. Polaillon describes the fractures as intra-uterine, and not as having occurred after birth. He says the inflammatory changes showed this.

THE MEDIAN NERVE AND ITS DISTRIBUTION TO THE FINGERS.—M. Richelot made, in January, 1875, a careful study of the nerves of the fingers. He found that the collateral dorsal nerves of the index, middle, and ring fingers proceed exclusively from the collateral palmar nerves, and are not furnished by the nerves of the back of the hand. On the index, the middle, and the ring finger the palmar collateral furnishes a branch to the upper part of the first phalanx, which passes along on each side of the dorsal aspect of the finger to its extremity. No such arrangement exists

in the thumb or little finger. The nerves of the back of the hand, radial and ulnar, furnish two collateral dorsals to the thumb and two to the little finger, but, reaching the root of the index, the middle, and the ring finger, it spends itself in small twigs without reaching the second phalanx. Two observations made by M. Richelot confirm these anatomical statements. In the first case, section of the median nerve; complete anæsthesia in the centre of the field of this nerve; the anæsthesia decreased from centre to periphery, and tended to disappear slowly. The absent sensibility was supplied by neighboring nerves.

A CONTRIBUTION TO CHEILOPLASTICS.— Maas (Cbl. f. Chir., 1879, p. 86; from Deutsche Zeitschr. f. Chir.) extirpated an extensive carcinoma of the under lip in a man of 42 years. A flap taken from the cheek to cover the wound became gangrenous, and another from the skin of the neck became crumpled and failed to cover the spot. Subsequently Maas made two four-cornered flaps out of the entire substance of the upper lip, the points of the flaps lying in the middle line of the lip. These were turned backwards and united with one another, and also with the borders of the defective part. The result was a peculiar and small oral opening instead of a mouth. Later, this was enlarged to a respectable size by the division of each angle. The result was quite satisfactory, as can be seen by reference to a picture given.

FOURNIER ON THE TREATMENT OF CER-EBRAL SYPHILIS.—From a clinical lecture by Dr. Fournier, published in the Bull. Gén. de Thérap., January 30, we extract the following summary: 1. Cerebral syphilis being made out, the health of the patient is dependent upon the most energetic treatment and nothing less. 2. This energetic treatment consists in the immediate and simultaneous administration of large and repeated doses of iodide of potassium and mercury. 3. Experience has shown the following method to be the safest and to give the greatest chance of success: (a), administration of iodide of potassium to the daily amount of eighty grains, on an average; (b), administration of mercury in the form of two daily inunctions of eighty, one hundred and twenty, and one hundred and sixty grains, progressively.

# PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, MARCH 15, 1879.

#### EDITORIAL.

MEDICAL LEGISLATION IN THE FORTY-FIFTH CONGRESS.

THE last moments of the Forty-Fifth Congress will long be memorable for the swift haste with which two bills of very great interest to the whole medical profession were crystallized into law.

First, we are delighted to announce that, after three years of work, a clause has been secured in the Sundry Civil Service bill, which appropriates twenty thousand dollars to print the first two volumes of the Catalogue of the National Medical Library. When it is remembered that it is impossible to pass through the press more than two volumes of this work in a year, and that Congress never abandons such an enterprise when once started, the completeness of the success is manifest.

The preposterous bill to make Dr. Woodworth Director-General of Health, which we some time since took occasion to comment upon, was jugulated in the committee of the House. Only two or three hours before the closing of the session, Mr. Gibson, of Louisiana, reported favorably, from the House Committee upon Epidemics, a bill for the creation of a Board of Health. which had been introduced by Mr. Mc-Gowan, of Michigan, and which, in its essential features, was in accord with the ideas advocated by the Public Health Association and by this journal. The bill was passed almost at once: nevertheless, as only one hour and a half remained before the final closing of the session, haste was of the utmost importance. It so happened that, in the private discussions immediately before the bill was launched upon the House, certain sections had been

marked, with pencil, "omit." The bill, however, passed the House with these clauses in it; but the transcribing clerk, who was urged to the utmost speed, dropped them out, so that the bill as it was recorded, and as it went to the Senate, did not contain them. The great haste was in part caused by the known fact that Dr. Woodworth would actively and personally oppose the bill in the Senate, and it was greatly feared would defeat it, or, at least, sufficiently retard it. Any determined filibustering by one or two Senators would have been fatal. The body of representatives and physicians who went to the Senate were, however, too overwhelming, and the bill was secured.

It is not necessary to comment upon the action of Dr. Woodworth during the past session, but it does now seem the right time for him to alter his tactics. He has been defeated by the power of the general profession. The personal influence exerted by him during the past winter upon Congress for his own as contrasted with the general good has been enormous and very skilfully employed, but he is not a match for the American medical profession as represented in the Public Health Association, and if he persist in opposition. refusing to fall in with what is evidently the best for the country, and to work harmoniously in the new organization, the chances are manifold that he himself will be eventually abolished. Public opinion in this country becomes, finally, an Atlantic, which will bury any Mrs. Partington who persists in broom-exercise.

We print in another column the bill as adopted, with the omitted clauses in italics. It will be seen that it gives to the Board all power over its own organization, over investigations to be made, and also requires it, in conjunction with the Academy of Science, etc., to prepare a well-digested plan of "national public health organization."

The evident intent of the bill is to stimulate and aid local health boards every-

where, not to supersede them. Much of the power of the act was lost with the omission of the clauses previously spoken of. It is expected, however, that they will be reinstated during the approaching extra session of Congress. Here is Dr. Woodworth's opportunity to thoroughly harmonize himself with the new order and re-establish his injured prestige. We trust most sincerely that he will honestly and persistently exert himself to work in unison with his colleagues and to secure the required legislation. The coming summer will probably strain to the utmost the new organization, with its unformed machinerv, even if it have five hundred thousand dollars at its disposal. There have certainly been during the last three months in various parts of the South isolated cases of vellow fever, which show that the cold has not completely destroyed the infection. There is, therefore, great danger of a repetition of the bitter experience of former occasions, when the second year was even worse than the first. The folly of a sole reliance upon quarantine seems to be clear, and for the newly-organized board to cope successfully with infection from without and with infection from within will require exertions no less remarkable than those put forth by the infant Hercules.

The permanent usefulness and scope of a proper National Health Board do not seem to be generally understood. There has been and still is in this country, even among the medical profession, a strange apathy, growing out of a lack of appreciation of what ought to be the relations of the national government to medicine. Thousands of dollars spent in dredging the seas, searching the poles, exploring the deserts.-two hundred and fifty thousand dollars appropriated during the past session for a new building to contain the "curiosities" thus acquired,—and yet we suppose not merely Congress but our own profession will look aghast at the boldness of the proposition that one hundred thousand

dollars be spent in building and equipping laboratories under the supervision of the National Board of Health, and thirty or forty thousand dollars be annually devoted to their maintenance. Nevertheless, the nation ought to do this for its own preservation, and if the profession once fully realizes the necessity the laity will follow. Let us, then, all rejoice over what has been achieved, and gird ourselves for renewed effort until medical science has a centre in Washington comparable in power and activity with those of natural history, astronomy, and other abstract sciences already existing.

### CORRESPONDENCE.

#### LONDON LETTER.

PERHAPS the most interesting communi-Cation made to any of our societies lately is that of Dr. Matthews Duncan to the Medical Society, on Antiseptic Midwifery. So important was it, and listened to with every attention by a distinguished audience, that an abstract of it may be acceptable to your readers. Being a great personal friend of Prof. Lister's, having left the northern metropolis at nearly the exact time Prof. Lister turned his steps southward, it might a priori be surmised that Dr. Duncan would be an advocate of the antiseptic plan of treatment. Consequently a large number of practitioners came to hear, and also to learn how antiseptics are applied to every-day midwifery. Dr. Duncan commenced by saying that there is no subject which excites more professional interest or more interest among the general public than that of puerperal deaths. A wife, the mis-tress of a household, the solace of her husband, the proud mother of a number of happy children, is suddenly snatched away after an auspicious event. There is something so sad about such deaths that all would welcome with heartfelt joy any plan which promises to lessen such disastrous events. Puerperal deaths own various causes, but by far the most frequent and prevalent causes are septicæmia and pyæmia. Both these diseases involve or imply inflammatory processes, and both are essentially septic. is against them that antiseptic midwifery wages war, and in which, he said, it had already achieved great success. The object of the paper was to spread and diffuse further knowledge on this important matter, and to stimulate further inquiry into it, with a view to the more general adoption of the beneficent antiseptic methods. Already, said Dr. Dun-

can, more pain is prevented, more life saved, by antiseptic methods than by all the recent improvements of modern midwifery combined; and there is no prospect half so bright and encouraging as that held out by the general adoption of the antiseptic treatment of the parturient condition. And, it is certain, all fervently wish that these high hopes may be realized. He would not, he said, proceed to discuss that division of the subject, the treatment of the blood by which the fermentation or sepsis is carried throughout the organism, as by the use of hyposulphites, introduced by Polli, of Milan. He would confine himself to the consideration of the local use of antiseptics. He pointed out that the healthy lochial discharge of some women approached in smell and odor putrefactive discharges, so that it was not always possible to discriminate them; but in all doubtful cases it was well to treat them as if putrefactive. The putrefying lochial discharge may find its way directly into the blood by the uterine sinuses, or be taken up by the lymphatics: in either case a state of blood-poisoning, or septicæmia, is set up. The removal of all putrefying material is essential to the arrest of this blood-condition. The antiseptic measures to be adopted consist of the removal of the offending material by the obstetrician's finger, or a pair of forceps, previously covered with an antiseptic. In some cases it becomes necessary to introduce the hand, which should previously be carbolized, by being smeared with the ordinary carbolic acid and oil mixture. By such treatment of the hand preparatory to its introduction into the female passages, two ends are attained. If there be no great amount of putrefaction present, the hand thus treated carries with it no danger of leaving putrefying matters, or germs, on the bared surface; while on the other hand it is a means of applying an antiseptic to a surface on which a putrefactive process may be actively progressing. Then as to injections into the uterus, he advocated carbolized water and the gentlest possible force sufficient to throw the fluid into the uterine cavity. of these precautions might lead to the introduction of air or fluid into the uterine sinuses, and produce baneful results. To secure gentleness of pressure, it was of the first importance to have free and sufficient exit for the fluid injected, and often it became necessary to use a double canula. The run-ning out should be carefully watched, and the moment the outflow ceases the injection should be stopped. He did not agree with those who advocated the leaving of the intrauterine tube in utero to act as a drainage-tube. If antiseptically plugged, it no longer acted as a drainage-tube, and not so plugged it was a source of danger in itself. To secure gentle pressure it was well to have a long tube, so that the fluid could be held above the patient; but it should not be raised to an undue height.

A warm carbolic lotion of the strength of one in fifty was useful. About half a pint or a pint should be injected at once, and the uterine cavity should be washed until the fluid returns clean. It is not desirable to have too frequent daily injections. Such irrigation might be desirable in some cases even when no putrefaction was present. I am not now engaged in midwifery practice, and never lost a patient in the parturient or postparturient state, but I can remember a number of cases where the lochia became offensive, where such irrigation would probably have given much comfort to the patient and those in attendance upon her. There was a certain risk of the carbolic acid producing poisoning of its own in certain cases, but Dr. Duncan said that the production of dark-colored urine merely was quite unimportant. At times more serious symptoms were produced, as shivering, cyanosis, and a weak and fast pulse. So far as he knew, no fatal case had yet occurred.

The great modern improvement in antiseptic midwifery was the prophylaxis of puerperal septicæmia or pyæmia. This subject could be divided into the prevention of danger from within and of danger from without. In addition to the most scrupulous carefulness as to perfect cleanliness about the parturient woman, in different Continental schools, they had adopted the plan of using carbolized ointment for smearing the finger previous to its introduction into the vagina, and systematic carbolized irrigation of the uterus after parturition, with most excellent results. As to the use of the spray in labor, at the moment of the birth of the child, it had been attempted, but was found to be very troublesome and in many ways objectionable, The spray had been tried in the performance of Cæsarean section, as it had in the operation of ovariotomy, with good results. It certainly seemed very desirable that the spray should be used for the treatment of the abdominal as well as the uterine incision; but the drawback here was that, in spite of all care on the part of the operator, septic material might find its way into the uterus through the natural passages. Returning to the subject of antiseptic midwifery, he said that now it was comparatively easy for physicians and nurses to keep themselves medically clean, and that the danger of puerperal septicæmia being carried by the medical man, and nurse, from one patient to another was much diminished, -an expression of opinion which elicited some adverse comment from Professor Playfair, who advocated the old plan of refraining from midwifery for a time, when it was found that one case of puerperal fever followed after another. Dr. Duncan pointed out that if this principle was carried out to its logical conclusion the general practitioner would have to abandon all his other practice if he, by any oversight, saw a case of scarlatina. If a piece of membrane or placenta was

retained in the uterus, it was well to use a three per cent. solution of carbolic acid for at least twelve days after the accouchement. as prophylaxis against danger arising from Others advocated a solution of the subsulphate of iron with glycerin under these circumstances. But poisoning from within was not so common a cause of septicæmia as poisoning from without; and care on the part of the obstetrician would be found the great means of obviating puerperal septicæmia. It was by avoidance that puerperal mortality was to be reduced in amount. When septicæmia had once been started, then the treatment was no longer that of prevention, but that of cure. Dr. Duncan, as he announced at the commencement of his lecture, did not go into the treatment of the blood in puerperal septicæmia, but perhaps your readers will not feel aggrieved if his remarks are supplemented by some others on the management of the general condition. When symptoms of septicæmia set in, not only should the irrigation of the uterus several times a day be assiduously carried out, but antiseptics should be administered internally. Chlorate of potash and the sulphites and hyposulphite of soda, together or singly, should be given freely by the mouth. In one case in my by-past general practice, a delicate woman was confined of a dead, putrid child: on vaginal examination the head felt like a leather bag with a lot of pieces of broken pot in it, the cranial bones being all loose and out of place, and the fœtus discolored and far advanced in putrefaction. In this case the lochia became very putrid and stank, and there were evidences of blood-poisoning on the part of the mother. By means of vaginal injections of a solution of the sulphites and the internal administration of chlorate of potash and sulphite of soda, the ominous symptoms passed away, and the woman made an excellent recovery. Such was a successful case treated antiseptically, but in a very primitive way. Now the management of the case would be considerably more advanced and scientific. In addition to the injections and the internal administration of the various antiseptics, it would be well to influence the air respired by the patient, and to place in the sick-room some disinfectant; the drawback to this being the objectionable smell of most of these potent agents. Sanitas is odorless, and solutions of thymol are not offensive certainly, if they do not form a very agreeable scent, and such should be used freely, being sprinkled over the floor, and, better still, being well sprayed about the room at frequent intervals. should be continued as long as any signs or symptoms of septicæmia remain. That such symptoms of septicæmia remain. should be the line of treatment to be pursued in all cases, either of established septicæmia or where it is threatening, there can be no doubt remaining. The question then arises, "Shall antiseptic precautions be taken in all cases of parturition?" As regards my personal opinion, it is affirmative of this propo-Antiseptic precautions, in the first place, are not expensive. They would form a species of cheap insurance. In the next place, they are free from danger if used care-Dr. Duncan pointed out that careless irrigation of the uterus might lead to serious consequences, air or fluid might be forced into the uterine sinuses; but against this may be set the presumption that the man who is careful enough to adopt antiseptic obstetric precautions would be careful enough to see the antiseptic method carried out properly in the one single source of possible danger, the irrigation of the uterus. As to the argument which might be raised that this involves unnecessary fuss and trouble, the answer must be returned that after certain unpleasant incidents it is commonly found that a very little care and foresight would have prevented the disasters. All preventive medicine has this for its raison-d'être, and many, if not most, practitioners will probably soon adopt anti-septic midwifery; and as to those who do not, it is probable that when they do have cases of puerperal septicæmia they will find their conduct and management of their cases sharply criticised. The obstetrician would carry with him, as part of his armamentarium, a bottle of carbolized oil with which to anoint the finger at each vaginal examination and to anoint the dorsal surface of the hand and arm in turning. Also the instrument might be smeared with this antiseptic before being applied, in the cases which require them. This would involve their being thoroughly cleaned; and then it is to be hoped we will hear no more of such sad cases as that reported in a recent number of the "Confessional" commenced in the British Medical Fournal quite lately, where a medical man owned that after delivering a woman with his forceps he forgot to clean them, and the next woman delivered with the forceps died of septicæmia. This matter cropped up in the discussion on Dr. Duncan's paper, and Dr. John Brunton pointed out how the wood of the handles of midwifery forceps often shrank from the metal, thus leaving a crevice in which putrefactive material might lodge. He exhibited his own forceps which he had had for years in constant use: they consisted entirely of metal, nickel-plated, and their condition was admirable. In addition to the above, a little carbolic acid might be carried, in case it turned out that the child was dead, and it might be well to irrigate the uterus in a few hours, so as to prevent any putrefactive change with its consequent dangers. An irrigation of the uterus once a day, in all cases, with carbolized water, would be a cleanly practice, as well as a sanitary precaution, in midwifery practice, and might be adopted generally with advantage.

How far the use of carbolized oil on the obstetrician's finger would tend to prevent that sad accident, syphilitic poisoning, it is difficult to say. An answer only could be given after a considerable experience by many and numerous individuals. But antiseptic midwifery must not be looked at from the point of view of the safety of the accoucheur, but from that of the safety of the patient. Where operative measures are anticipated, I venture to think that antiseptic precautions will always be taken, after the evidence we have already before us.

And, lastly, comes the cause of all this, the thing born,—the infant itself. Dr. Duncan said that young organisms are readily poisoned septicæmically. It appears that ulceration of the stump of the umbilical cord has been followed by blood-poisoning in some cases, and that pus has found its way into the umbilical vessels. It is well then to dress the stump antiseptically, by enclosing it in a piece of lint treated previously to an application of carbolic acid and oil. An animated discussion followed Dr. Duncan's paper.

A case of opium-poisoning treated successfully by the subcutaneous injection of atropine has just occurred in the practice of an exhouse-surgeon of the West London Hospital. On the 14th of February, 1878, I had one grain of sulphate of atropia injected subcutaneously into a woman dying of opium-poisoning. On the 13th of February, 1879, a case was admitted into the Leeds Infirmary. In the absence of the house-physician, the housesurgeon took charge of the patient. He has forwarded me the following notes. A man aged 35 was admitted at 9 P.M., who was said to have taken zvi of laudanum one hour previously. He was able to answer questions, his pupils were contracted, he was irritable and somewhat excited, saying he wished he had taken twice as much. He refused to have the stomach-pump applied. A scruple of sulphate of zinc was given. At 9.40 there was no vomiting, and the patient was getting worse; the stomach-pump was resorted to. and about twelve ounces of brownish-colored fluid, smelling of opium, was withdrawn, and a pint of strong coffee injected. At 11.20 the patient was worse, and could be roused only with great difficulty. Pulse 120; respirations 15 per minute. The pupils were reduced to a pin's point; the patient had been walked about continuously. One-tenth of a grain of atropia was then administered subcutaneously; condition slightly improved till 12.20 A.M., when he became utterly unconscious and incapable of being roused by the most violent means, including faradaism, etc., etc.; pupils firmly contracted; pulse feeble and rapid; respiration down to 12. A quarter of a grain of atropia was then injected subcutaneously. At 12.40 A.M. the patient was somewhat better; respiration 18; pulse firmer and 120 per minute. The pupils were dilated;

there was no return of consciousness, the extremities were cold, but the sleep was more natural. At 1.10 A.M. the respirations suddenly sank to 12, but rose again to 20 after artificial respiration had been carried on for ten minutes; pulse good; the patient continued to sleep till 8 A.M., when he awoke, was able to answer questions and to take food, and to the present time (16th, 6 P.M.) has continued to improve. This case illustrates the toxic effect of opium upon the respiratory centres, and also how the paralysis so induced can be met and antagonized by the use of atro-The only criticism I have to make is that if a quarter of a grain of atropia had been injected at the very first, the serious symptoms which appeared might have been kept off. The case is very encouraging as to the future treatment of opium-poisoning by the subcutaneous injection of atropine.

J. MILNER FOTHERGILL.

## PROCEEDINGS OF SOCIETIES.

PHILADELPHIA COUNTY MEDICAL SO-CIETY.

A T a conversational meeting, held at the hall of the College of Physicians, Philadelphia, February 12, 1879, Dr. Henry H. Smith, President, in the chair, Dr. Benjamin Lee made some remarks on "The Adaptable Porous Spinal Jacket" (see page 277), for which a vote of thanks was passed.

Dr. Packard inquired how long the jacket should be worn to effect a cure, and what is the rule as to the time when it should be left off?

Dr. Lee.—The matter of the introduction of apparatus of this kind is so recent that the question can scarcely meet a definitive answer. The rule for its removal would consist in the disappearance of all symptoms of active disease in the spine. If the contraction of the psoas has disappeared; if the patient is able to jump down from an elevation without pain: if he can stoop forward and touch the floor, bending the spine, without pain; as far as the treatment of the disease itself is concerned, the apparatus may then be left off. But if the question of restoring the symmetry of the body to as great an extent as possible be an object, the jacket may be advantageously worn a much longer time. An important effect from the application of the jacket is the prevention of rotation and settling, by maintaining the ribs in good position, and, from this support to the thorax, I am hopeful that the spinal jacket will give us a cure in a shorter space of time than the old form of brace that merely supported the spine itself.

Dr. Charles B. Nancrede inquired whether the lecturer had found any difficulty in using the silicate of soda; he had noticed, last summer, that for some unknown reason it had refused to harden in several cases.

Dr. Lee had observed this only the day previous, but could not account for it. In reply to another question, he stated that the felt jacket is to be worn day and night, is only to be removed temporarily for personal cleanliness, and that it is of the first importance that the patient should always be suspended in order to reapply it. Otherwise it will not adapt itself perfectly to the irregularities of the surface, will be painful, and will lose somewhat of its firmness.

The President, Dr. Henry H. Smith, after calling Dr. Packard to the chair, said that the treatment of spinal caries had for a long time possessed peculiar interest to him, that he had had extended experience in it, and had given the subject much thought, and he felt obliged to say that his conclusions differed very much from those of his distinguished friend the lecturer of the evening, as well as from others elsewhere who have had a very wide experience in the treatment of spinal disorders. Under such circumstances, he feared that this difference of opinion might be due to an erroneous conclusion on his own part, but, at the same time, his objections to some of the lecturer's opinions, as well as to those of others, were based upon several important anatomical facts, on which, if he reasoned wrongly, he would like to be enlightened by the lecturer. These views were based particularly upon the anatomical relations of the parts, and the effect of fixed dressings. Sometimes he thought that those who wrote most on the subject ignored greatly these anatomical relations of the spinal column, and were too purely mechanical in their ideas. feared that there was such a thing as living too long, when he noticed that plans of treat-ment formerly well known had been lost sight of, and others re-named as novelties. Fifty years ago, in the practice of Dr. J. K. Mitchell, of this city, the speaker had seen almost the same apparatus for suspension by the head and shoulders as had been exhibited this evening. This plan was then used by Dr. Mitchell with the promise of very excellent results, but in several instances in which it had been tried, under the speaker's observation, the result was not what had been anticipated by either the surgeon or the patient. Indeed, very little had been gained by suspension that was not also derived from the old treatment of confining the patient to bed.

Independently of the fact that treatment by extension is not new, and independently of its former results, the speaker would inquire of the lecturer how suspension by the armpits can stretch the spinal column. You may push the scapulæ as far up as the ears, and yet not stretch the spine. The axillary horns of the crutch-like splint devised by Pott were not intended to extend the spinal column, except by the instrument-makers; but the axillary

or crutch-head processes kept the spine from bending forward, and thus straightened it, whilst apparently increasing its length. Dr. Smith would also extend this objection to the practice of self-suspension, which, though it might stretch the pectoral and scapular muscles, could not possibly extend the vertebral column. The difference in height shown after suspension by the head is in some cases but slight, or may be an error in measurement, but in other cases it is due to throwing the shoulders backward and partially unbending the bow formed in the spinal curvature.

There was one remark made by the lecturer that had attracted Dr. Smith's attention and hearty approval, and that was the effect of the jacket upon the ribs. In these cases there is almost always more or less deformity of the sternum, owing to the fact that there is twisting of the ribs; the diseased vertebræ acting upon the ribs, these are rotated upon their attachment to the transverse processes of the vertebræ, the tubercle of the rib acting as a fixed point, the leverage being thus sufficient to alter the relations of the ribs to each other and produce traction upon the costal cartilages and sternum. Hence the patient is often deformed in front, or is "chicken-breasted."

The suspension, therefore, does not extend the spine by the direct extension of the vertebral column, but it does so indirectly through the ribs, thus overcoming the deformity of the sternum and throwing the ribs into better position. Hence a modification of the vertebral angle.

The intervertebral cartilages also demand attention; they are very important aids to inspiration in breathing, as when there is flexion of the spinal column these cartilages, at their anterior part, are very much compressed, and lose their function of extending the spine. When the ribs are lifted up by the external support of a jacket, the pressure is removed from these cartilages, and the spine is straightened through the ribs. The cervico-vertebral connections and intervertebral bodies may be stretched by the method of suspension of the head and chin, but certainly this does not extend to the part below the shoulders.

It can scarcely be denied that caries of the spine, in the majority of cases, is produced by tubercular deposit in the spongy structure of the vertebral bodies. The depraved general health of the patients shows this to be true; and the speaker thought that anything that tended to prevent the skin from carrying on its excrementitious functions, such as an immovable dressing, would favor this tubercular deposit by impairing the blood. The perforated porous jacket suggested by the lecturer, Dr. Smith thought was a great improvement over the heavy plaster-of-Paris dressing recommended in New York. He preferred, however, the perforated skin jacket of Dr. Darrach, of New Jersey, to any other that he had seen. If caries of the vertebræ is due to

tubercles, the prognosis of any plan of treatment must take it into consideration, for a deposit of tubercle in one place, it is well known, is very likely to be associated, sooner or later, with deposit elsewhere. The patient under treatment this evening had, as was seen, a tubercular deposit in his vertebræ, and also in his hip-joint, and in all probability would, in the course of time, have a similar deposit in the lung, as he had shown in an address delivered by him upon this subject at the last meeting of the American Medical Association.

Dr. Lee coincided most fully with the views expressed by the President upon what might be termed the mechanico-anatomical aspect of the question, and did not think that anything was gained by taking the hips as a fixed point of support and attempting to force up the shoulders from them, as in the apparatus of the shops. Ever since he first began to study the subject, he had been impressed with the fact that the articulation of the shoulder was the most movable articulation in the entire body; that the top of the shoulder may be pushed almost up to the top of the head

without affecting the spine.

He was therefore led to adopt this form of apparatus (Taylor's splint), which makes use of the shoulder and the pelvic bones as points of leverage, and of the articular processes as a fulcrum, by means of which to elevate the bodies of the vertebræ at and above the seat of disease, thus unbending the curved spine in the manner indicated by the diagram which the President had placed upon the black-board. The articular processes are very rarely implicated in the affection, and it is owing to this fact that we are able to take the weight of the body off from the vertebral bodies in this way and throw it upon them, thus permitting a cure to take place. We give nature a chance to step in and heal the ulcerated processes that are going on. When the contiguous surfaces of the vertebræ are in a state of ulceration, they irritate each other by every motion of the body; and while they are undergoing this disintegrating pressure, just so long it is impossible for the ulceration to heal. If we can now, taking the articular process, as I say, as a fulcrum, separate the bodies of the vertebræ to the slightest degree, we give a chance for the deposit of callus and the healing by anchylosis. If this is not done, the softening and ulceration will continue until the ribs attached to the diseased vertebræ sink down and rest on those beneath, and thus support the vertebræ, preventing further pressure. There is now a chance to heal by natural aid, but a cure will not take place before this occurs, and it will, of course, be with great deformity.

In the suspensory apparatus the shoulderstraps are not intended to extend the spine, but merely to relieve the patient occasionally, by taking part of the weight from the neck in applying the jacket. When using self-suspension as an exercise, the axillary bands are never used.

As regards the effects of extension, it would appear that the difference, which I have been able to show you this evening, of one and one-quarter inches, in the height of the patient, is in itself a proof not easily to be gotten over that there is an actual increase in the length of the spinal column. Whatever elongation took place must have been in the spine. Concerning the pathology of the disease, he was not able to accept the view that it is necessarily a result of tubercular deposit. That it occurs to a much greater extent in persons of a tuberculous or strumous diathesis, is undoubtedly true, but that there is actual deposit of tubercle in the majority of cases has not been borne out by pathological anatomy, nor, in his experience, by the results of treatment. He was unable to conceive how, if tubercle has been deposited in the vertebra, the mere taking off of the pressure will lead to a perfect cure. Take a case who has been suffering from caries of the spine for several years, with all the signs of struma, remove the pressure from the diseased vertebræ, and in one week's time all the signs of struma will begin to diminish and ultimately disappear. tient will recover, although with more or less deformity, and will enjoy a good state of health for years. This is not the clinical history of tubercle, and he could not conceive how such a result could take place if there was such a deposit as has been referred to, while if it were simple caries it was readily understood.

Dr. Nancrede wished to make one observation upon the anatomical points that had been referred to by the President. The shoulder is ordinarily a very movable articulation, as had been stated. The clavicle is closely connected with the sternum, at its inner extremity. When the patient practises self-suspension, by the contraction of the pectoralis minor, aided by the subclavius and pectoralis major in front and the serratus magnus behind, the clavicle becomes fixed, so that any force acting upon the outer extremity of this bone will do so equally upon the sternum, thus drawing the anterior portion of the chest upwards and forwards, indirectly unbending and extending the spine, especially if the disease be in the lower dorsal or lumbar regions, as then the weight of the limbs acts as a direct extending force.

Dr. George Hamilton inferred that it had been implied that nature would be unable to effect a cure in this disease if it were tuberculous. Fifty years ago it was taught that there was no cure for tubercle, but we have lived long enough to know better, and have learned that tubercle may be cured, as demonstrated by autopsies, where cicatrices of healed tubercles are often found in the lung. If a cure may result in a movable structure like the lung, he was unable to see why it

should not in the vertebræ.

Dr. Henry H. Smith said, in reply to Dr. Hamilton, that a case of spinal caries may recover without apparatus, by anchylosis.

He was quite willing to admit the great improvement that was evident in the modern treatment of spinal diseases, but he wished it to be distinctly understood that he thought that the porous and other jackets acted not by directly extending the spine, but by supporting the ribs in a good position, preventing flexion of the spine, and keeping the diseased bones at perfect rest until anchylosis occurred, whilst they improved the general health in permitting the patient to benefit by fresh air and exercise,—a great improvement over confinement to bed, as formerly practised.

Dr. De Forrest Willard said that he had long been interested in the treatment of spinal disease by the means of apparatus, and particularly by the immovable jacket. He regarded the action upon the ribs as a valuable one. It gives greater rest to the parts and makes them immovable, and he thought that it is to this latter action, rather than to extension, that we owe the good results obtained from this dressing. The application of the jacket, which encircles the ribs in front, most certainly serves a better purpose than any form of apparatus applied merely to the spine itself, as in the old forms of brace. By this means we make each rib give some support to the spine; the first nine or ten certainly afford efficient aid as "side-braces."

By this apparatus we have consequently gained a great step in the treatment of spinal disease, and although there were a considerable percentage of cases in which it was inapplicable, yet after several hundred applications he was glad to testify as to the general utility of

the jacket.

As regards the old forms of extension, it had always seemed to him to be worse than useless to attempt to make extension from the axillæ, since it could do no more than support the shoulders. He had done away with the axillary straps for suspension long ago, using only the head-support and the rope for the hands. Concerning this head-suspension, he had never used it without feeling that some bad or serious results might ensue, especially in the sharply angular distortions in children, in which the disease was rapidly progressing. In applying the jacket, he merely lifts such cases off from their heels, for fear that in their struggles some injury might follow. The weight of the body might be sufficient to break a slight bridge of commencing anchylosis, and laceration of or pressure upon the spinal cord would result.

We can fix no time for the length of treatment. Some cases run very slowly, and others very rapidly; some will be cured in one year, others not for several years. He had applied five or six jackets to some cases that are still wearing them. Every time they return they say they are better, can take longer walks,

have more strength, and suffer no pain; but still he did not feel at liberty to discontinue their use of the support. He had been experimenting for several months with felting, having become dissatisfied with plaster, and he believed that it had many advantages.

He asked the lecturer whether he used dry

or moist heat to soften the felt.

Dr. Lee.—The moist heat gives the most perfect and satisfactory results, but in his plan the jacket is made at the factory and not by the physician. Of course, if considerable improvement has taken place, and it no longer fits the patient, the felt may be warmed and

re-adjusted.

A very important topic had been raised by the last speaker,—that is, the struggling of young children. On this account he makes it a rule never to suspend a child for the purpose of applying the jacket, without giving him a daily practice in self-suspension for a week or two previous. It is surprising to see how soon children lose their terror and enjoy the use of the swing.

Nervous symptoms from foreign substance in the intestines.

Dr. M. O'Hara reported the case of a child 16 months old, who had for two days presented the following symptoms: intense pain, as if from violent colic; threatening convulsions; and sleeplessness. The bowels and bladder were thoroughly evacuated without effect. Relief was obtained only after narcotism by potassium bromide and opium. By accident the mother perceived a foreign body protruding from the anus, and by traction withdrew about eight inches of ordinary grocery-twine, which at once afforded complete relief.

A somewhat similar case in an adult was referred to. Upon examination for suspected anal fissure, Dr. O'Hara discovered a hair projecting from the anus about one inch. Careful traction resulted in the delivery of ten inches of jet-black hair, the distal extremity of which was armed with a fragment of hardened fecal matter the size of a pea.

#### PATHOLOGICAL SOCIETY OF PHILA-DELPHIA.

THURSDAY EVENING, DECEMBER 26, 1878.

THE PRESIDENT, DR. H. LENOX HODGE, in the chair.

(Continued from page 270.)

Tumor of hand. Presented by Dr. John H. PACKARD.

M RS. Y., æt. 41, was seen by me at the request of Dr. Isaac W. Hughes, December 13, 1878, on account of a tumor of the right hand. She had, about a year previously, strained the middle finger in pushing some clothes into a basket; it remained painful and stiff, and five months later she

noticed the swelling, which steadily increased from that time.

The tumor was about the size of a small orange, decidedly lobulated, a small mass projecting into the palm nearly at its centre. The skin covering it was of a purplish-red color, smooth and shining, looking as if it was very tense; but there was a feeling of fluctuation on pressure. Sometimes there was a great deal of pain in the growth, shooting up the arm. There were no enlarged lymphatic glands.

Her general health was excellent, and her appearance that of robust health. So far as she knew, her family history was good.

December 16, in presence of Drs. Hughes, Sr. and Jr., and Dr. I. P. Stidham, I punctured the tumor with a grooved needle, the patient having been previously etherized; only a little blood escaped. I therefore proceeded at once to amputate just above the wrist by Teale's method slightly modified. Carbolized gut ligatures were applied, a small drainage-tube placed between the flaps, and the wound dressed with carbolized cerate.

She has had no bad symptoms, and the healing is now (December 27) almost com-

plete.

The tumor on section shows a capsule, enclosing a soft, brain-like substance, lobulated, some of the nodules being much more vascular than others. On hasty examination under the microscope it seemed to me to be a round-celled sarcoma.

As the knife penetrated the deeper portions of the mass, it encountered a spiculum of bone, probably a portion of the metacarpal of the middle finger.

The specimen was referred to the Committee

on Morbid Growths.

Report of the Committee on Morbid Growths.—"The tumor of the hand, presented by Dr. Packard, is found to consist of round lymphoid cells, without any apparent intercellular substances. The vessels are seen to be channels through the cells, possessing no distinct walls.

"The growth is a round-cell sarcoma. "January 9, 1879."

Suppuration in an old hydrocele with thickened walls—Excision of the mass. Presented by Dr. J. H. PACKARD.

J. L., æt. 64, was admitted to the Episcopal Hospital, November 20, 1878, on account of a large and painful tumor of the left half of the scrotum. He looked fully the age which he gave, with a well-marked arcus senilis round both corneæ, but showed no other sign of ill health. He had formerly been a boiler-maker, but for a number of years had been obliged to take up less laborious work.

The source of the pain seemed to be partly the dragging weight of the tumor, partly the irritation from friction of his clothes. No enlargement of lymphatic glands existed. He stated that he had long had a hydrocele, which was first tapped thirty years ago and repeatedly since; the last time being about two years ago. He thought that the sac was not then fully emptied, "something like clots" remaining.

Active inflammation, resulting in abscess, and the discharge of a large amount of pus, required appropriate treatment before any operation for the removal of the tumor could be instituted. On the 14th of December, it being evident that this suppuration was superficial to the mass, and the skin being almost free of abnormal redness, excision was performed in the usual way.

Upon section the tumor was found to consist of an enormously thickened tunica vaginalis, the walls being in some places fully half an inch through. The cavity was full of thick creamy pus, and at its posterior part lay the testicle, to all appearance perfectly

healthy.

After the operation the patient recovered rapidly, the discharge from the cavity left in the scrotum being at first very great, but soon lessening under the use of injections of carbolic acid, I part to 20 of water. The wound is now (December 26) almost entirely healed.

Suppuration must be extremely rare in cases of hydrocele, since no author, so far as my knowledge goes, mentions it. I am therefore inclined to think that in the case now reported there was, on the occasion of the last tapping, a vessel wounded, and that a hæmatocele was thus formed, in which, from some pressure or other irritation, inflammation was set up and the contents converted into pus. Unusual tumor of the breast, following con-

finement—Amputation—Recovery. By Dr.

W. W. KEEN.

Mrs. McC., æt. 30, was delivered of her first child, April 20, 1878. Nothing of any special moment occurred, saving a tedious recovery by the bladder of its expulsive power. The catheter had to be used for over a week, During this time I watched the breasts, as usual, lest any danger of a mammary abscess should arise, but at no time was any lump detected. In June she called to see me, when I found a lump at the upper part of the right breast, which she stated had been there for some three weeks. It was as large as an English walnut, and presented all the ordinary symptoms of a milk cake, except that it was indolent. During the summer, in consequence of inattention on her part, and absence on my own, I saw her only at somewhat long intervals. The usual means to bring about resolution and, failing in this, to bring on suppuration were tried, but were all fruitless. Only one small superficial abscess formed and was opened, and that one was situated below and inside the nipple. Meantime the tumor had gradually invaded more and more of the breast, and by the middle of October had involved the whole of it. Soon after this

a sudden inflammation appeared, and covered the chest, upper arm, and shoulder. It was not erysipelatous; was attended with considerable œdema and constitutional disturbance. Fearing suppuration behind the mammary gland as soon as the acute inflammation disappeared, which was in three or four days, I made an exploratory incision at the lower and outer edge of the breast which was the seat of greatest pain and tenderness, although no fluctuation could be discovered. The incision gave no evidence of pus, and healed in a week or ten days.

Early in November a consultation was had with Dr. Albert H. Smith, who confirmed my previously expressed opinion as to the advisability of amputation of the breast, which was done November 22, 1878. At that time her

condition was as follows:

Her general health had suffered but little. Her appetite and sleep were fair. The pain, which was never lancinating, was a dull, aching pain, partly attributable to weight. breast was enlarged to about the size of the double fist. It was hard; pitted slightly, but perceptibly, on pressure; was inflamed; of a deep-red color; at points almost purple. The nipple was not retracted, but was considerably smaller and less evident than it had been. The skin was not movable over the breast, but was evidently involved by the tumor, especially in the upper (the older) part, where it was brawny. It was not ulcerated. The tumor was also evidently spreading beyond the limits of the gland towards the axilla. The breast was still movable over the subjacent muscles. None of the axillary glands were involved; nor were the mammary veins enlarged.

The breast was removed by two elliptical incisions, including the nipple and chiefly the skin below the nipple. No adhesions existed except at the site of the exploratory incision and where the tumor was extending towards the axilla. All of this was carefully dissected out. Its limits here were ill defined, but the rest of the tumor had a well-defined margin exclusively limited to the mammary gland. The operation was done throughout with careful antiseptic precautions. Three arteries were tied with catgut, and, after inserting a drainage-tube traversing the entire depth of the wound, the edges were approximated by eleven

wire sutures.

She reacted well. The urine had to be drawn for three days. On the 24th (two days after the operation), the first rise of temperature took place (101.4°). She ate, however, a good Christmas dinner, and in two days the temperature had fallen to 99°. A very scanty suppuration occurred after a few days, caused, I think, by a too-slow shortening of the drainage-tube, which was not entirely removed till the eighth day. It ceased immediately on its removal, and on the twelfth day the wound was entirely healed and the last sutures removed.

The tumor on section was hard, but did not creak under the knife. It was mottled-white, and apparently fibrous in its texture, and dotted here and there with small patches of fat. No evidence of suppuration existed at any point. It measured five inches in diameter and two inches in thickness.

Report of the Committee on Morbid Growths. -"A histological examination of the tumor from the mammary gland, presented by Dr. Keen, shows it to be composed mostly of fibrillar connective tissue, with the atrophied acini of the gland, still retaining their epithelial lining, scattered through it. The new formation may be considered a peri-canalicular fibroma.

"January 9, 1879."

Metastatic deposits in the pleura, lungs, thoracic glands, and kidney, from a patient who had atrophic scirrhus of the breast for seventeen years and a half. Presented by Dr. S. W. Gross.

The specimens exhibited to the Society were removed from a woman whose history, up to eighteen months before her death, is fully described in the *Philadelphia Medical Times*, vol. viii. p. 84. The primary growth, along with implication of the corresponding axillary lymphatic glands, made its appearance in a prolific female at the age of 46 years, or six years after the menopause. At the expiration of sixteen years the right mamma was not more than one-sixth of the volume of its fellow, which was small and flabby. It was converted into an irregular, densely hard, and inelastic nodulated mass, which was closely adherent to the subjacent structures and to the skin, which was thin, finely injected, and ruddy, and the seat of several superficial ulcers, which were covered with crusts. nipple formed a small elevation on a hard The axillary glands of the right side were converted into a dense circumscribed tumor as large as a walnut, which was firmly attached to the walls of the chest. The supraclavicular glands were slightly enlarged, and several glands were detected in the left axilla, which were first noticed four months previously. On the inner side of the withered breast, parallel with the median furrow of the chest, the skin was the seat of four shot-like nodules. The woman's general health was excellent, and she merely complained of sharp intermittent pains at the site of the excoria-

From this time, May 12, 1877, until the 27th of November, 1878, I lost sight of the patient, when, through the kindness of Dr. J. M. Barton and Dr. G. A. Rex, who had seen her during the interval, I was enabled to be present at the post-mortem examination and secure the diseased gland, with a portion of the walls of the thorax and the attached right lung, the left lung, and the right kidney, For about twelve months before her decease she had suffered from cough, occasional slight

hæmoptysis, oppressed breathing, and other signs of tubercle.

In addition to the appearances already described, the skin of the scapular and mammary regions was found to be occupied by several secondary growths, lenticular in shape, the largest of which were nearly half an inch wide and three-sixteenths of an inch in their greatest thickness. In addition to these, similar growths were observed in the skin of the left breast, two inches above the nipple and at the base of the ensiform cartilage. The pectoral muscles were also the seat of extensive deposits. The right parietal and visceral layers of the pleura were intimately adherent. and the lung was so closely attached that it was torn through in attempts to separate it from the inner surface of the chest. Both lungs were pervaded by tubercles, but especially the right, in the latter of which several small cavities were discovered. They were also filled with metastatic scirrhous deposits, which varied in size from a small shot to a cherry. The parietal pleura investing the diaphragm and lung of the left side was beset with a multitude of nodules, from the periphery of which numerous lines radiated, through intraction of the connective-tissue fibrils of that membrane, thereby presenting the appearance of the hub of a wheel with its diverging spokes. The bronchial and mediastinal glands were converted into scirrhous masses, and the right kidney was the seat of twelve superficial nodules. The remaining viscera were free from disease.

Microscopical examination of one of the larger nodules of the skin, and of the axillary glands, conducted with Dr. Shakespeare, revealed the usual appearances of scirrhous

carcinoma.

# REVIEWS AND BOOK NOTICES.

A HAND-BOOK OF NURSING, FOR FAMILY AND GENERAL USE. Philadelphia, J. B. Lippincott & Co.

This is a very full treatise upon the subject in hand, over two hundred and fifty pages being occupied with discussions of the duties and proper knowledge of the nurse. It is not only full, but very plainly written, and, after careful examination, seems to us very correct in almost all its teachings. We have noticed, however, one atrocious blunder, evidently not typographical, but a lapsus pennæ, which we trust will be corrected before life is lost through its means. This error is on page 162, in the following sentence: "If the poison is an alkali, such as sugar of lead, etc., give vinegar and water as soon as possible"!

This whole section on poisons is, indeed, very poor, probably much the poorest in the book, and should be rewritten, so as to make it more complete and correct. There should

be an accurate tabulated list of the antidotes of all the common poisons, with plain directions for treatment previous to arrival of the physician. Outside of the toxic portion we have found nothing worthy of censure, and much deserving praise, in the book. We sincerely congratulate the managers of the Connecticut Training School for Nurses on the manual they have given to the world.

Anthropology. By Dr. Paul Topinard. With Preface by Prof. Paul Broca. Translated by Robert T. H. Bartley, M.D. London, Chapman & Hall. Philadelphia, J. B. Lippincott & Co., 1878.

This book of five hundred and forty-five pages constitutes one volume of the "Library of Contemporary Science" now in course of publication, a series which we can commend to any of our readers desirous of being en rapport with the scientific progress of the day. Any person who may expect to find Dr. Topinard's brochure easy reading or superficial in its character will be much mistaken. It is a technical volume of facts and of methods, or, rather, of methods and of facts, condensed to the utmost, which will put whoever masters it well on in the royal high-road to anthropological authority. Anthropology is defined to be a study of man moral and physical; but as interpreted in the volume before us it embraces the natural history of man viewed in the manner that the zoologist would study a species of agricultural ant or other intelligent lower organism.

The first part of the book treats of the anatomical characters of the human organism, touching also the physiological characteristics, and especially comparing man with other animals. It is very technical in style, but is sufficiently intelligible to a physician willing to study it closely. The conclusion arrived at is that the only characters separating man from the anthropoid apes are that he always stands erect, and that his brain is three times as large as that of his nearest neighbors. Huxley's, Broca's, and other zoological classifications are discussed,—that of Broca being adopted and man made a family, first in the order of primates and in the class of mammalia.

The second part of the book treats of the Races of Mankind. This discussion occupies about three hundred pages, and, of course, cannot be here followed in detail. Fulness of detail rather than clearness or steadiness of generalization characterizes these chapters of Dr. Topinard's volume, possibly because the subject does not admit of thorough clearness, possibly because the view he takes of the subject is not consistent with clearness. A vast number of very interesting facts are given; as example may be mentioned the account of the Ainos,—a race whose skin on the back, limbs, and front of the chest is covered so closely with hair as to constitute a thick fur. The concluding generalization is that the family

man-is composed of a number of types equivalent to what are considered as species in the lower animals, but having an unlimited power of interbreeding with one another, although not springing from a common origin. A very careful reading of the arguments brought forward has convinced us that there is a complete failure to prove the plurality of origin in man. The lack of clearness in the distinguishing race-characters, the almost complete absence from the earth of any pure types, the plastic mouldings of anatomical and physiological characters everywhere apparent. seem only to lead to the conclusion that though the riddle may not at present be read, there is no conclusive evidence that man has had more than one parentage; that the theory that all men have had a common origin may not be proven by, but is not incompatible with. facts at present known.

The final thirty pages of the present volume are taken up with the consideration of the origin of man. Haeckel is the authority. Here certainly all is speculation, and imagination runs riot. The Land of Lemuria, submerged beneath the Indian Ocean, yields not up its dead, and the man-ape does not yet appear. Until that day we may doubt.

ATLAS OF DISEASES OF THE MEMBRANA TYMPANI. By H. MACNAUGHTON JONES. Philadelphia, Lindsay & Blakiston, 1878.

"Atlases" are the fashion of the day; scarcely any morbid condition or medical plant is scathless from the rage of the chromolithographer. With this fashion we are not altogether in sympathy; but if ever such representations are valuable to the diagnostician, it is in conditions so obscure and yet so close to the range of sight as are diseases of the membrana tympani. Figures of such affections as "polypi proceeding from meatus" are of course fit only to amuse children; but the bulk of the illustrations of the present volume is composed of fifty-four carefully drawn and colored figures of the membrana tympani, which render the work of permanent value. To all who are called upon to make aural diagnosis the book commends itself for reference in cases of doubt; and to the student of aural medicine it must prove valuable in making the crooked straight and the rough places plain.

HEALTH PRIMERS. New York, D. Appleton & Co., 1879.

This series, which we believe is a reprint of one now appearing in England, consists of a number of small duodecimo books, about one hundred pages each, written for popular instruction upon various subjects connected with hygiene and "preventive medicine." There are to be fifteen volumes in all; of these, four, "Exercise and Training," "Premature Death," "The House," "Alcohol," have been received. We have carefully read

three of these and looked over the fourth, and can, with an unjaundiced or otherwise afflicted conscience, highly commend them all as being to the point, clearly and simply written, and full of instruction proper for the laity, and for many of those who call themselves doctors. We trust that these health tracts may circulate widely, feeling that if they do so they will accomplish much good. It seems to us that they are open only to one valid criticism, namely, that of being so intensely English that in some cases they will not meet the exact needs of our country. Science is cosmopolitan, but not so the applications of science to the amelioration of the habits and surroundings of a peculiar nation.

### GLEANINGS FROM EXCHANGES.

DIAGNOSIS AND TREATMENT OF OBSTRUC-TION OF THE BOWELS.—The British Medical Journal for January II contains several articles on this important and practical subject, of which we give a brief summary. Dr. T. Clifford Allbutt says, "When a doctor is called to a case of obstruction of the bowels, he has at once to determine, if possible, the process, the site, and the nature of the block. As regards the process of it, he will try to decide whether the obstruction be due, first, to enteritis, plugging, intussusception, hernia, or stricture. He may then decide where the disturbance lies, and, finally, of what nature it is. The enteritis may be primary, second-ary, or tubercular, etc. Plugging may be fecal, polypoid, due to gall-stone, and so forth, and may be accompanied by enteritis. Intussusception may be strangulated, or simply incarcerated, and is probably always accompanied by inflammation, simple, purulent, or gangrenous. Hernia may be in the usual external or internal sites, or may be due to other accidental twisting or snaring of a loop of bowel, and is sure to be accompanied by some degree of inflammation. Finally, stricture may be simple, malignant, or due to pressure from without, and is less frequently accompanied by inflammation than the pre-vious events. With all the other forms of obstruction, inflammation of the bowel is more or less surely associated."

Setting aside cases of chronic obstruction, which rarely need heroic action, we find that in this affection inflammation always counts for something, generally for a good deal. Whether we know how to deal with the main cause or not, we generally know how to deal with the inflammation, and, excepting in the extremest urgency, our first duty is to simplify our case by lessening this. Unfortunately, means are often used which tend rather to aggravate the enteritis, and of all these, injections into the bowel are the most mischievous. Even in fecal accumulation it is not the fecal mass, but the inflammation set up by it, to which

the explosion is due; even for diagnostic purposes, enemata are rated far too highly, and are rarely of much service. It is our duty to quiet the inflammation first, and then to remove the cause, if possible. Enemata are still worse in strangulation, and yet Dr. Allbutt says he has never been called in to a case of such obstruction without finding that such a measure has been assiduously employed, to the serious injury of the patient. He gives the following axiom: "If rest be in every way sedulously enforced, and the inflammation which palsies the bowel be carefully com-bated by the use of sedatives, such as opium and belladonna, and other means, cases of obstruction of the bowels tend to recovery." Dr. Allbutt adds an illustrative case, and concludes by urging a similar practice in internal hernia as in external,—opiates with gentle taxis, and, if this fails, opening the abdomen and reposition.

Mr. T. P. Teale advises exploration of the abdominal cavity: we no longer fear to cut the peritoneum, and the patient should not suffer by our delaying the operation. "May we not," he says, "look forward to the time when we shall treat peritonitis, traumatic, ovarian, or puerperal, by opening and washing out the abdominal cavity and emptying

the intestines?"

Mr. G. F. Hodgson gives two cases of intussusception of the bowels in infants. In his remarks on these cases, which resulted fatally, he urges the necessity of a prompt and accurate diagnosis as essential to successful treatment. That treatment would seem to be, first, to avoid purgatives; secondly, to give anodynes frequently; and thirdly, to adopt measures for mechanically rectifying the displacement. For the latter purpose, a copious, bland fluid injection has sometimes succeeded, though more often it has failed. the fluid generally returning at once as injected. Insufflation of air is said to have wrought more cures than fluid injections. Fluid and air failing, no time should be lost before gastrotomy and the untucking of the gut should be attempted. Mr. Hodgson adds several interesting references.

Mr. N. P. Blake gives a case of intussusception in an infant of seven months, which was successfully treated by distention of the large intestine with thin gruel, under chloro-

form

THE ANTIPYRETIC TREATMENT OF TYPHOID FEVER.—In a paper bearing this title in the American Practitioner for January, Dr. G. C. Smythe announces conclusions substantially as follows: I. What is usually known as the "typhoid condition" is probably caused by the persistent elevation of temperature, in which the blood is poisoned by the débris of broken-down nitrogenous tissue, this long-continued fever-heat causing degenerations in vital organs, or death from paralysis of the brain or heart, 2. This being the case, the

most important indication is to keep the patient cool. The hourly use of the thermometer is the most trustworthy guide to this end. 3. Cold-water baths and quinia are the best agents for lowering the temperature. In the first week of the disease, and before quinia has been given, a bath may be required every two or three hours. After the patient has been thoroughly cooled with the quinia, three or four baths per day will answer, and a still less number later in the disease. The "grad-ually cooled" bath appears to Dr. Smythe to be the best. 4. Quinia is the more valuable agent of the two, and can be used in all stages of the disease; while the baths seem to annoy some patients, especially during the third week and the latter part of the second. Frequently no other treatment is necessary for two or three days after a full dose of quinia. In the latter weeks of the disease the full amount of the remedy can be materially lessened. It always moves the bowels several times the day following its administration, lessening the tympanites; and the unabsorbed portion thoroughly disinfects the discharges, thereby contributing largely towards preventing the spread of the disease. After a remission is produced by quinia, the temperature rises in accordance with a fixed law, attention to which is called by Dr. Smythe in the body of his paper.

THE SURGICAL TREATMENT OF ANASARCA. -Mr. H. Adolphus Wickers communicates the following (Medical Times and Gazette, January 4).—The legs having been well oiled and a rubber sheet placed under them, about twenty or thirty punctures are rapidly made in their sides with a stout needle or hare-lip pin; some sponges which have been well squeezed out in a saturated watery solution of salicylic acid are now placed against the punctures, so as to absorb the fluid as it transudes; these sponges, as they become filled, are squeezed out, and again passed through a solution of salicylic acid, before being again placed against the patient's skin. In this manner renewals may be required about every two or three hours; and four or five pints of fluid may be drained away during the first day, the whole process being possibly completed in four or five days, at the end of which time the punctures are usually healed. By the use of salicylic acid, decomposition of the dropsical fluid does not occur, the sponges are kept free from fetor, the skin is not irritated, and cutaneous inflammations of a low type

are entirely prevented.

CITRATE OF CAFFEIN AS A DIURETIC IN CARDIAC DROPSY.—Prof. Gubler called attention some time since to the property of the citrate or the bromhydrate of caffein, given in doses of four to eight grains, of producing abundant and instantaneous diuresis in cases of cardiac dropsy, either when given hypodermically or by the mouth. Dr. Lewis Shapter (*Practitioner*, January) adds to this his experience

with the citrate alone. The dose given by Dr. S, has not exceeded three grains in any case, on account of the nausea and vomiting produced by larger amounts. This has been sufficient, however, to establish copious diuresis as a general thing, even in the most advanced stages of cardiac dropsy. In one of Dr. S.'s cases a pill of citrate of caffein, three grains, was given at night. The urine previously passed had been to the amount of a pint to a pint and a half in twenty-four hours. During the first night after taking the pill, and the next morning, the patient passed two and a half pints of urine. Subsequently citrate of caffein in three-grain doses was ordered in solution with glycerin and water, and for six weeks, while this was continued, the amount of urine passed during each twenty-four hours amounted to from two to three pints. Other cases are detailed by Dr. Shapter, in which the citrate of caffein acted equally well. observations lead him to the opinion that citrate of caffein occupies a "special" place as a therapeutic agent in cardiac disorder, its position being limited as a cardiac diuretic to advanced cases of cardiac disorders, or such advancing cases of cardiac disorders where muscular embarrassment and neurosal, incoordinate cardiac action (the indicators of progressive mural decay) exist. The existence of these symptoms appears clinically to forbid the administration of "tonic" doses of digitalis so long as an outlet has not been effected from the venous system which shall, coincidently with more powerful cardiac contraction, relieve the stagnating pressure of venous blood on the right side of the heart. Citrate of caffein is (1) a diuretic. (2) It increases the heart's action, either (a) directly by stimulating the organ itself, or (b) indirectly by means of the arteries which it also excites to further contraction. After discussing its physiological action at some length, Dr. S. concludes that, whatever may be the true theory of the action of citrate of caffein, the opinion is forced upon him from observation, that in doses of gr. iii to gr. vi it is a diuretic and cardiac stimulant of great value in cases of cardiac dropsy where a dilated, feeble, and irregularly contracting heart undergoing progressive mural decay is the main clinical and pathological element to be contended against.

# MISCELLANY.

THE GERMAN MEDICAL FACULTIES.—The total number of ordinary professorships in the medical faculties of Prussia is eighty-eight, of which four will in future be abolished. The lowest salary is 1800 marks (\$450), at Königsberg; the highest, 7500 (\$1837), at Berlin, Halle, and Göttingen. There are forty-two salaried extraordinary professors. In future their number will be reduced to thirty-eight. The highest salary is 3600 marks (\$900), at Bonn; the lowest, 600 (\$150), at Göttingen. In addition there are thirty-four extraordinary professors, who receive no salary. The total number of privat-docenten, or private tutors, who are unpaid and unrecognized by the state, is one hundred and three, of whom

forty-three are at Berlin.

THE "CONFESSIONAL."—At the beginning of the year, our contemporary the British Medical Journal announced the opening of a "Confessional" for the anonymous record of faults, errors, mishaps, and warnings in practice. The first contributor tells a tale of the delivery of a decomposed fœtus by the forceps, the subsequent use of the same forceps without disinfection, in another case, and the death of this patient, of puerperal peritonitis, as the result. In a subsequent number of the journal other experiences are related. One is of a patient who died of exhaustion, hemorrhage, and syncope, possibly hastened by being kept sitting up. Another is of a dose of calomel given in melæna, with probable ulceration of the bowel, resulting in fatal hemorrhage. Unquestionably, if many members of the profession could be induced to tell, thus anonymously, of their mistakes, much might be learned.

TRANSCENDENTAL THERAPEUTICS.—Among the stories handed down by tradition and current among the resident physicians of one of our large hospitals some years ago, was the following, told the writer by one of his seniors in service. "If you want to get on the right side of your 'chief,' Dr. Q," said he, "just ask him to give you the formula for a good digestive pill. But wait; I will tell it you myself. You make a pill in three concentric layers, and the patient swallows it. Outside is a coating of nitrate of silver; that is dissolved in the stomach, and stimulates the flow of gastric juice. Now, just as this outer coating is dissolved, the pill pops through the pyloric orifice, and as it enters the intestine the second layer comes into play,—aloes. On goes the pill in its beneficent course, stimulating peristaltic action, gathering up the débris, carrying all before it until, just as it reaches the anus, the last trace of aloes is exhausted, and the core is exposed,—belladonna (you know all about belladonna, of course,-just graduated last month; well, you know how it dilates the pupil; - D'ye twig?)—muscles of the anus relax, and your patient is relieved. That's Dr. Q.'s digestive pill. Now, that's what I call science. Of course you have to calculate the proportions of the ingredients very closely. Q. will tell you all about it." The "junior," however, suspected a hoax, and never asked, and so the true proportions of Dr. Q.'s digestive pill have never been made known.

PRECAUTIONS against the introduction of the plague into this country have already been taken by the authorities, Dr. Woodworth, Surgeon-General United States Marine Hospital Service, having issued the following regulations, dated March 5, and addressed to

officers of customs, etc.:

"Until further orders, no vessel from any part of the Black Sea or the Sea of Azov, conveying any rags, furs, skins, hair, feathers, boxed or baled clothing or bedding, or any similar articles liable to convey infection, nor any vessel from any part of the Mediterranean or Red Seas, having on board such articles coming from Southern Russia, shall enter any port of the United States until such articles shall have been removed from the vessel to open lighters, or to some isolated locality, and the vessel disinfected and thoroughly ventilated, and the suspected articles shall be disinfected either by chemical agents and exposure to free currents of air or by burning, as shall be determined by the Surgeon-General of the Marine Hospital Service.

"The certificate of the State or municipal quarantine officers of health may be accepted as satisfactory evidence of compliance with

these regulations on the part of the vessel."
Under this regulation, the Collector of New York has already ordered a cargo of rags coming from Trieste to be "sealed up" until it shall have been taken in hand by the health authorities and properly disinfected.

DWELLINGS OF THE POOR, BERLIN.—The Director of the Statistical Department of the Municipality of Berlin, in a recent report, shows that the dwellings of the poor in that city are in a worse condition than they were fourteen years ago. In 1861 the number of dwellings up one pair of stairs was 262 per 1000; now it is 207; while the underground dwellings have increased from 92 to 102 per 1000, and those without kitchens from 69 to 231 per 1000. Nearly 120,000 people live underground, and 90,000 of them are lodged at such a depth below the surface that the atmosphere is dangerous to life. Of the 940,571 inhabitants of Berlin, about 10,000 live in dwellings where a fire cannot be lighted, and 426,000 in others where only one room can be warmed.

PIGEONS AS CARRIERS OF PRESCRIPTIONS.— It appears, from the Scalpel, that a physician in the Isle of Wight, who has a large country practice, is accustomed to take about with him on his rounds a number of carrier-pigeons. When he writes a prescription for his patient, the paper is tied to the leg of one of the birds, which is forthwith loosened and flies straight home to the doctor's pharmacy. Here the assistant receives the prescription, and it is put up at once instead of waiting until the doctor returns, much loss of time being thus saved.

Benzoated cotton is employed extensively by Professor Volkmann, of Halle, being applied to granulating sores, and constituting his ordinary dressing for small wounds. It is particularly non-irritating.

### NOTES AND QUERIES.

AN ACT TO PREVENT THE INTRODUCTION OF INFECTIOUS OR CONTAGIOUS DISEASES INTO THE UNITED STATES, AND TO ESTABLISH A NATIONAL BOARD OF HEALTH.

NATIONAL BOARD OF HEALTH.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That there shall be established a National Board of Health, to consist of seven members, to be appointed by the President, by and with the advice and consent of the Senate, not more than one of whom shall be appointed from any one State, whose compensation, during the time when actually engaged in the performance of their duties under this act, shall be ten dollars per diem each and reasonable expenses, and of one medical officer of the Army, one medical officer of the Marine Hospital Service, and one officer from the Department of Justice, to be detailed by the Secretaries of the several Departments and the Attorney-General, respectively, and the officers so detailed shall receive no compensation. Said board shall meet in Washington within thirty days after the passage of this act, and in Washington or elsewhere, from time to time, upon notice from the president of the board, who is to be chosen by the members thereof, or upon its own adjournments, and shall frame all rules and regulations authorized or required by this act, and shall make or cause to be made such special examinations and investigations at any place or places within the United States or a treasure over a schew mandesuch special examinations and investigations at any place or places special examinations and investigations at any place or places within the United States or at foreign ports, as they may deem best, to aid in the execution of this act and the promotion of

special examinations and investigations at any place or places within the United States or at foreign ports, as they may deem best, to aid in the execution of this act and the promotion of its objects.

SEC. 2. The duties of the National Board of Health shall be to obtain information upon all matters affecting the public health, to advise the several departments of the government, the executives of the several States, and the Commissioners of the District of Columbia, on all questions submitted by them, or whenever in the opinion of the board such advice may tend to the preservation and improvement of the public health. It shall also aid in the work of State boards of health, and of State or municipal quarantine authorities, by such means and to such extent as may seem to it necessary and desirable. And for this purpose it is authorized to pay a certain portion of the expenses of such State boards of health or quarantine authorities, at its discretion: Provided, That the amount so paid shall in no case exceed one half the total expenses for any such board or quarantine authority: And provided further, That such reports and information as may be required by the National Board of the Academy of Science, which is hereby requested and directed to co-operate with them for that purpose, shall report to Congress at its next session a full statement of its transactions, together with a plan for a national public health or ganization, which plan shall be prepared after consultation with the principal sanitary organizations and the sanitarians of the several States of the United States, special attention being given to the subject of quarantine, both maritime and inland, and especially as to regulations which should be established between State or local systems of quarantine and a national quarantine system.

Sec. 4. The sum of fifty thousand dollars, or so much thereof as may be necessary, is hereby appropriated to pay the salaries and expenses of said board, and the further sum of five hundred thousand dollars, or so m

Approved March 3, 1879.

#### OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY FROM FEBRUARY 23 TO MARCH 8,

KING, WILLIAM S., LIBUTENANT-COLONEL AND SURGEON.

—His sick-leave extended eight months, with permission to go beyond sea. S. O. 53, A. G. O., March 6, 1879.

FITZGERALD, J. A., CAPTAIN AND ASSISTANT-SURGEON.— Granted leave of absence for four months on surgeon's certificate of disability, to take effect March 1, 1879. S. O. 42, A. G. O., February 20, 1879.

POWELL, JUNIUS LEVERT, appointed ASSISTANT-SURGEON U. S. ARMY, with the rank of FIRST-LIEUTENANT, to date June 6, 1878, having successfully passed an examination before the Army Medical Board, in session in New York City, N.Y.

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# PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, MARCH 29, 1879.

## ORIGINAL LECTURES.

### SICK-ROOM COOKERY.

BY MISS DODS.

Delivered at Association Hall, Philadelphia, March 14, 1879.

Reported for the Medical Times.

OOKING, considered as a fine art, is. as Dr. Johnson would say, "by no means unworthy the attention of men of genius and erudition;" but when, as an applied science, it is brought under contribution for the welfare of the sick, its capabilities for good can scarcely be disputed; even doctors agree upon this point. And among those who are not sick, the softening and ameliorating influences of a good dinner, well cooked, are sometimes exhibited to a notable degree, it is said, more especially in the male sex: hence the physiological observation, which has become common knowledge, that "the way to a man's heart is through his stomach."

Since Professor Blot departed, we no longer say, "They do these things much better in France," but we sit cheerfully at the feet of a representative of Mother England, Miss Dods, as with great skill, aplomb, and a gas-stove, she gives demonstrative lessons in the art which may not inaptly be called the Father of the Arts, and of which, as testified by her South Kensington diploma, she is mistress.

As the lecture on "Sick-Room Cookery" is a practical one of some hygienic importance, we give it, with the explanations, as nearly as possible in the words of the experienced and skilful teacher.

the experienced and skilful teacher.

The first dish about which I will show you to-day is

#### RESTORATIVE JELLY.

As usual, I will give you first the various articles called for by the recipe. Pure isinglass, one ounce; gum arabic (powdered), one-quarter ounce; sugar, two ounces; port wine, half a pint (Imperial); cloves, half a dozen; half a teaspoonful of pure lemon-juice or extract of lemon.

Directions.—First put in a pitcher one ounce of isinglass; add to it one-quarter of an ounce of gum arabic (powdered);

next, two ounces of sugar, with half a teaspoonful of lemon-juice, and half a dozen cloves. Pour over this mixture half a pint of best port wine, which should be properly measured, and not poured directly from the bottle, as bottles are not made to contain an Imperial pint. Then cover the pitcher closely with brown paper, in order to retain the strength of the port wine, and set it aside for an hour to let the ingredients soak. Some persons allow the mixture to stand over-night, but it is apt to lose its freshness and become mushy. When the hour is up, put the pitcher into a large saucepanful of boiling water, and stir till the isinglass is completely melted; then allow the water to boil violently for a few minutes, and strain the jelly into a flat dish. When cold, the ielly should be cut into dice, so that it can be served to a patient and eaten by him without any exertion.

This restorative jelly is very nourishing in cases of extreme prostration, when the patient is unable to make the slightest exertion or is unconscious, as a small square may be slipped into the mouth, where it will readily melt, and so, passing down the throat, sustain life without the action of the patient. This preparation, however, is rather costly, as only the best materials should be used. Russian isinglass should be invariably preferred, although it may be made with the sheet. It will, however, keep for a year if put in a tin box and kept in a cool place. By taking a square of this jelly, pouring hot water over it, and allowing it to stand, it will, when cool, make a delicious drink for invalids.

The next dish is beef-tea. I shall show you how to prepare this most important article of sick-room diet in four different ways. Here is the recipe for the first or

#### QUICKLY-MADE BEEF-TEA,

which can be made in twenty minutes. Take any desired quantity of steak from the top part of the round, as this has less fat and more juice than any other part of the ox; remove every morsel of fat, and divide the meat into small pieces, cutting across the grain; put the meat in a dry saucepan, and allow it to sweat for five minutes over a slow fire, stirring occasionally to prevent sticking. This is how all beef-essences are prepared. After sweating for five minutes, you will find the meat

white in color and surrounded by a very rich nourishing gravy, which, in cases of great exhaustion, may be given in this form. But ordinarily you next pour over the meat its weight of cold water, allowing a pint of water to a pound of beef. Stir until the water boils; it must not boil again, but simmer gently for five or ten minutes, until all the juice is drawn out; then strain carefully into a bowl, and if there is a particle of fat on the top, remove it with a piece of brown, unsized paper. By this method you may take off every star of fat without wasting a drop of the beeftea, as is done when using a ladle or spoon. In this way you may have strong beef-tea in twenty minutes.

You have noticed that I have said nothing about salt. It is because in sick-room cookery we never allow a grain to be used. In some cases of sickness, as, for instance, typhoid fever, salt is thought to act as an irritant, and therefore, on our sick-room cookery-days, salt is left out of our list of ingredients. Of course the nurse, if the condition of the patient allow it, may add a pinch when about to give the beef-tea.

#### A CUPFUL OF ARROWROOT.

I shall next show you how to make a cupful of arrowroot, and then how to turn it into a pudding. For a cupful of arrowroot there would be required a dessertspoonful of arrowroot, half a pint of milk or water, and one teaspoonful of sugar. First, put the milk on in a small saucepan to boil; put the arrowroot and sugar into a basin, and mix smooth with a little cold milk; the instant the milk boils, pour it over the arrowroot, stirring all the time until it thickens, which, if the arrowroot is quite dry, will occur immediately; if, however, the fecula has been in a damp place it will not thicken, and will have to be turned back into the saucepan and stirred over the fire until it does. latter plan is not so delicate, as arrowroot should never be boiled, if possible. Arrowroot should always be kept in a tin box, in a dry place.

#### ARROWROOT PUDDING.

For making this cupful of arrowroot into a pudding you will require two eggs, another teaspoonful of sugar, and half an ounce of butter. Separate the whites from the yelks of the eggs, and beat the former into a stiff froth; the lighter they are

whipped the better. Nothing is so nice as arrowroot for giving nourishment. In itself it contains very little gluten, but it will often form the only means of making an irritable stomach retain food, or, if stimulants are required, it makes a pleasant vehicle, as, for instance, in giving brandy or wine, only in this case it should not be prepared with milk, but with water only. Having beaten the whites to a froth, I next drop into the thoroughlycooled arrowroot the yelks and the teaspoonful of sugar, beating well; then drop in the whites, mixing very carefully so as not to break the grain of the froth; grease a small pie-dish with the half an ounce of butter, pour the mixture in, and set in the oven for five minutes, or just long enough to brown the top. If it remain longer, it will be heavy.

This arrowroot pudding is very nice for delicate children. In it there are two eggs, half a pint of milk, and the sugar, which form the actual amount of nourishment. Mothers should remember this who are in the habit of giving their infants boiled arrowroot made simply with water; they will starve on such diet, as there is hardly any nourishment, except what may be in the teaspoonful of sugar.

#### BEEF-TEA; SECOND FORMULA.

We shall now learn how to make beeftea according to the second process, which is intended for cases of indigestion.

Take one-quarter of a pound of beef from the top part of the round, as in the first way; cut in small pieces, precisely as before, across the grain; then cover it with its weight of cold water,—that is, one gill,—and put it on a slow part of the fire to boil. It ought to take twenty minutes to reach the boiling-point, when it must be instantly strained and set aside to cool. All sediment falls to the bottom; the fat rises to the top, when it must be removed with a piece of brown paper, and the tea should remain the color of pale sherry, and be as easily digested as water. Beef is more nourishing than mutton, as in every pound of beef there are five parts more iron than is contained in mutton. For this reason we prefer, as a rule, to use beef in cooking for invalids.

#### WINE WHEY .- TWO RECEIPTS.

We next come to white-wine whey, for which you will require half a pint of milk,

one wineglassful of sherry, and one teaspoonful of sugar. Put in a small saucepan the half-pint of milk, with the teaspoonful of sugar, and place on the fire to boil. It must be watched carefully, in order to catch the exact instant it boils. when the sherry should now be poured in. and curdling takes place immediately; it should be strained through a piece of cloth, or a very fine sieve, and given to the patient as hot as possible. There is another wine whey made in the same manner, but requiring half a pint of sherry, the yelks of two eggs, and one teaspoonful of sugar. Beat the yelks with the sugar; put the wine on the fire, and when it boils pour in the yelks, well beaten; when it curdles, strain as before, and serve hot.

#### OATMEAL GRUEL.

I shall now teach you how to prepare gruel and porridge. For gruel there is required one half-pint of milk, a small tablespoonful of oatmeal, a small pinch of salt, one half-teaspoonful of sugar, and a piece of butter the size of a nutmeg. never gives gruel to a very sick person, and therefore a little salt may be used. First, put the milk in a saucepan; then in a small basin the oatmeal and salt, and with a little cold milk mix smooth; after which, pour all into the saucepan of milk. Stir constantly over the fire until it boils, allowing it to boil for about five minutes; at the last minute add the butter and sugar. You may also grate a little nutmeg if desired, or port wine may be given, but in the latter case the gruel should invariably be made with water.

There are three kinds of oatmeal,—coarse, medium, and fine. The coarse requires a long time to prepare, and is rather heavy for an invalid; the fine has been ground and reground until it has lost much of its nutritive quality; so that I prefer the medium when making gruel for young children or any person with weak digestion.

PORRIDGE.

In making porridge, the oatmeal should be stirred in cold water, as that swells the grain. I generally allow about three table-spoonfuls of meal to a pint of water and a pinch of salt. After it comes to a boil, allow it to continue boiling slowly for half an hour. Some persons, I know, allow the porridge to cook for more than an hour, but this has a tendency to make it pasty,

and I think it is not as delicate or as palatable as when boiled only thirty minutes.

BROILED BEEFSTEAK OR CHOP.

While we are waiting for the gruel to boil, I will tell you how to cook beefsteak or chop. Take a piece of the best steak, an inch thick (I believe it is called porterhouse in this country), and beat it first with a rolling-pin. Never use a sharp substance.—as the back of a knife.—for that will cut the fibre, while the object of the round pin is to thoroughly soften the fibre without breaking it, thus retaining all the juice. Put the meat on a broiler, and keep it over a clear fire from seven to ten minutes: if over gas, once turning is sufficient, but if over coal, turn several times. Have ready a plate, as hot as possible; place the steak on it, with a pinch of salt, a little pepper, and a morsel of butter. In five minutes the salt and butter will have drawn out a rich gravy, which will be delicious as well as sustaining.

A chop should be cooked in exactly the same manner, except that seven minutes on the broiler will suffice.

BEEF-TEA: THIRD FORMULA—RAW BEEF-TEA.

We come now to the third method of making beef-tea,—what is called uncooked or raw beef-tea. Only a little of this should be made at a time, as it sours quickly. Take one ounce of beef at a time, and as soon as one cupful is given prepare the next. The beef, as I directed you before, should be from the top part of the round; this must be cut across the grain, and shred down with a knife. You see, as I scrape off the pulp, how the fibres show in white lines through the meat. For each ounce allow two tablespoonfuls of cold water. Let the meat soak for fifteen minutes, and then the water will be colored with the juice. Use no salt, as this is given only to patients in very low condi-In summer it should be given cold. Indeed, at any time, the colder it is the better; but if it should be desired, allow it to warm just enough to remove the chill, but on no account must it boil.

BEEF-TEA; FOURTH FORMULA—LONG-MADE BEEF-TEA.

While this is soaking, I will tell you of still another kind, which is called longmade beef-tea. It is used in India. Get two or three pounds of shin of beef; remove all the skin and the marrow from the

bone; cut the meat into small pieces, and have the bone broken up. Take also a knuckle of yeal,—that is, just the knucklebone; have it broken up, and put all into a strong earthen jar. Place the jar in a large saucepan of boiling water, and tie the cover down with a piece of stout brown paper, using neither salt nor pepper. it boil slowly all day. When done, the jar will be filled with meat-gravy; strain this, and when cold it will be a strong jelly. In summer this may be served cold, and in winter pour hot water over a portion, and you have beef-tea. This will keep a week in summer, in a cool place, and much longer in winter.

### ORIGINAL COMMUNICATIONS

ABSCESS OF THE LIVER-OPERA-TION-RECOVERY.

BY CHARLES W. DULLES, M.D.,

Surgical Registrar to the Hospital of the University of Pennsylvania.

Read before the West Philadelphia Medical Book Club, March 7, 1879.

UST at this time, when the subject of abscess in the liver is attracting considerable attention, when its diagnosis and treatment are being widely discussed, it has fallen to my lot to have a case where these points had to be practically considered, and which I think sufficiently interesting to justify its being made public. The case was as follows:

Charles B., a boy 12 years of age, four feet three inches high, weighing about eighty pounds, of slender build, and a lymphatic temperament, came under my notice December 25, 1878, in a condition of extreme jaundice. Of his previous history I could obtain no satisfactory details, but accepted the statement that since a short attack of diarrhœa, about two weeks before, he had been constipated and become gradually tinged with yellow, until he had reached the state in which I saw him. At this time his whole skin was of a rich saffron hue, and his conjunctivæ and the mucous membrane of his tongue and cheeks were stained with bile-pigment. Upon further examination I found, besides a coated and somewhat brownish tongue, only a slight degree of tenderness over the region of the liver and an apparent slight enlargement; to which, owing to the normal relatively large size of children's livers, I did not attach much importance. I concluded I had a case of congestion of the liver, and treated it with a purge of sulphate of magnesia, followed by the use of

twenty-minim doses of syrup of ipecacuanha four times daily, quinine two grains thrice daily, and every morning, on waking, an aperient of sulphate of magnesia, with sulphate of iron, in a considerable quantity of water. At the same time the boy was kept in bed. After a few days, on account of pain just below the lowest ribs, where they curve up to the costal cartilages, I had applied a blister four inches long and two wide. This drew well and healed nicely. To my satisfaction, it seemed to put an end to the pain, and the boy be-coming less jaundiced, his urine and fæces appearing to have resumed their natural state, in ten days I allowed him to get up, supposing

my care would not be needed further.

But three days later I was asked to see him again, because he complained of pain in his side. I thought I should find this due to the irritation of the seat of the blister by his clothing. To my astonishment, however, I found in the abdominal wall, just below the margin of the lowest ribs, a sensible bulging, about three inches across, a quarter of an inch perhaps in elevation, quite hard, and sensitive on deep pressure. I at once concluded that an abscess of the liver was forming,-an opinion which was subsequently concurred in by Dr. Ronaldson and Dr. Daniel Guitéras, who

kindly examined the case for me.

I now put the boy again to bed, renewed the administration of quinine and the morning aperient, and had applied over the right hypochondrium cloths wrung out of hot water. with a little laudanum poured on,-these to be frequently renewed and kept covered with oiled silk. There was, I may here say, neither at this time nor subsequently, any appearance of jaundice, save the faintest possible trace of that which had previously existed. The tu-mor, however, increased until it was about four inches in breadth and had attained an elevation above the surrounding level of about three-quarters of an inch. In the course of a few days there was distinct, though limited and deep, fluctuation under the centre of the swelling, and, with the assistance of Dr. Ronaldson, on January 10, I removed, by means of an aspirator, about a fluidounce of pus; when the aspirator ceased to act. No anæsthetic was used, except, locally, the application of pure carbolic acid. This caused intense burning for a few seconds, after which the sensibility of the skin seemed to be entirely abolished. The pus obtained was very thick and grumous, looking more like broken-down liver-tissue than pus, and it coagulated with great rapidity. Its odor was very peculiar, suggesting to my senses that of Neufchâtel cheese. Microscopical examination, made in the pathological laboratory of the University of Pennsylvania, disclosed in the presence of degenerated liver-cells (which were compared with some obtained from an hepatic abscess found in the course of an autopsy) and unmistakable crystals of

bilirubin. After the aspiration the tumor and pain were materially diminished, and the boy seemed to feel much better. Laudanum and lead-water were applied locally, and strict

quiet enjoined.

On the 8th of January, two days before the aspiration, a careful physical examination had shown an area of percussion-dulness, extending from below the fourth rib, in the line of the right nipple, six inches downward, and from the spinal column round to within two inches of the median line of the abdomen, thus making a roughly quadrilateral figure corresponding to the presumed area of the enlarged right lobe of the liver. Extending from this towards the left, in front, was the dulness to be expected from a normal left lobe. Over the whole of the presumed right lobe there was great tenderness, which was most acute where the external swelling appeared.

The day after the aspiration, percussion and palpation seemed to show the area of dulness and sensitiveness to be diminished, and for a week the treatment consisted of absolute rest, soft food, quinine, the aperient before alluded to, and an occasional enema of water (a pint) with tr. assafætidæ (a fluidrachm), to secure the expulsion of flatus, which at times accumulated so as to demand attention.

On the fourth day the external tumor seemed to be recurring, and hot wet cloths were applied locally. The fifth day the boy was quite restless, his appearance clayey, his tongue furred, his pulse 96, the tumor more marked. I did not like the look of things now, and ordered whisky (f3ss) in milk every three The sixth day Dr. Stryker and Dr. Ronaldson saw him with me in consultation. We found his pulse 116, his tongue somewhat furred, the tumor increasing and presenting distinct fluctuation. It was then decided to operate for the evacuation of its contents the following day. The amount of whisky to be taken every three hours was increased to f3i.

At II A.M. on January 17, the seventh day after the aspiration, in the presence and with the co-operation of Drs. Stryker, Ronaldson, and Judd, with the patient in the recumbent position, I opened the abscess with one thrust and cut of a straight bistoury. The tissues divided were of the thickness of half an inch. and the incision I made about two-thirds of an inch long. No anæsthetic was used,— a matter which I think was of some importance in favor of the patient, as avoiding the struggles inseparable from ether narcosis, and the consequent risk of rupturing the abscess. As soon as the incision was made, thick pus mixed with some blood poured out. The pus was flaky, and, after the first flow, slipped over the abdomen into a basin in almost detached masses, which quickly coagulated into a consistent and apparently homogeneous whole, amounting to about three fluidounces. Gentle and uninterrupted pressure was made

over the tumor, and care taken that the flow of pus should be steady and constant, so that no air should pass backward into the cavity of the abscess. After evacuating as much as possible by this gentle pressure, and without remitting it at all, a tent of twisted oakum was passed into the abscess to a depth of two inches, a thread attached to prevent its being lost, the incision covered with a large thick pad of absorbent cotton, and a binder placed

round the body and pinned firmly.

The administration of whisky and quinine as before was ordered, and ten drops of laudanum given. At 6 P.M. the patient was com-fortable, without pain, his pulse 116,—the same as before the operation. That night he slept well, and the next day, January 18, his pulse was 100, his general appearance decidedly improved. On removing the tent, I evacuated-with the same precautions against admitting air as before - about an ounce of thick creamy pus mixed with some blood. A new tent was now put in, the near surface of the abdomen anointed with ol. morrhuæ (this only because olive oil was not at hand). and a small pad of absorbent cotton, soaked in the same, applied over and about the incision,-now a fistula,-and covered with a large pad of the dry cotton, while again the whole was firmly included in a binder. same general treatment was ordered as before.

On January 19 his pulse was 112, his appearance still better, the external swelling apparently all gone, and very little local tenderness remaining. On removing the tent no pus escaped, only a little blood as if from granulation-tissue. The tent was washed in carbolic-acid solution, soaked in a mixture of equal parts of water and tr. iodini, and replaced, going in only about an inch this time. The dressing was renewed as on the day before, and the same general treatment ordered.

On January 20 his pulse was 80; his appearance very good. The evening before. he had had a difficult, straining passage of very dark, hard fæces, followed by two, softer and lighter. The tent and dressing were re-

newed as usual.

On January 21 his pulse was 92, his appearance continuing good; he had had two easy passages of soft, dark-brown fæces. I now removed the tent finally, leaving a shallow, healthy sinus, dressed this with absorbent cotton and a binder, and ordered chalk mixture (f3i t. d.) to quiet the bowels.

On January 22 his pulse was 80; he was in good condition every way; only a few drops of pus on the cotton. I dressed the closed sinus with adhesive plaster and a piece of lint coated with oxide-of-zinc ointment, covering in with an adhesive strap and a binder.

On January 23 he was better still; pulse 80; no tenderness on pressure; boy of a good healthy color. I made no change of the dressings, and permitted him to be propped up a while in bed, preparatory to sitting up.

On January 24 I did not see him. From this time onward he improved steadily and quickly until, on January 31, he was fully convalescent, the wound healed and covered with a somewhat retracted cicatrix. At this writing, March 5, the boy is in very good health, the liver reduced to its normal size, and there remains no demonstrable evidence of what he has gone through, except the cicatrix, situated just at the point of the tenth rib of the right side.

Remarks.—Among the points of interest in connection with this case, one of the chief is the difficulty of diagnosis, -and first on account of the youth of the patient. Abscess of the liver is extremely rare among children; so rare that it was no surprise to me to find, in reading a reprint from the Transactions of the Philadelphia College of Physicians, of a case reported by Dr. Louis Starr in 1875, that there had entered his head the same question which had thrust itself before me, whether after all this really was an abscess of the liver. His patient was younger even than mine, being only 5 years old, and, like mine, had recently been under treatment for a trouble which excited no suspicion of what was impend-Further, in his case, the supposed cause of the abscess was quite remote, while in the case I have just recited the presumable cause—a blow with a base-ball received six months before - was so remote as to make its probability open to doubt. Again, the absence of severe constitutional disturbance before the opening of the abscess was noticeable in both cases, the diagnosis resting almost exclusively upon physical signs. These, however, were such as to leave, perhaps, no room for doubt as to the nature of the lesions; that is, there was, after a short period of localized and severe pain, the formation of a bulging in the abdominal wall just below the level of the ribs, accompanied by a steady increase of the area of dulness belonging to the right lobe of the liver, with pain upon deep pressure, the formation of pus, at first deep-seated, but gradually approaching the surface until evacuation was effected, when the tumor subsided, the area of dulness shrunk to its normal size, and the wound healed by a retracted cicatrix.

There can, therefore, I think, be no reasonable doubt that the diagnosis of liverabscess was correct. None of the gentlemen who saw this case entertained any; and the result of the microscopical examination of the contents of the abscess al-

layed any suspicion excited by the unusually favorable issue.

In regard to the treatment to be adopted in cases of hepatic abscess there is little difference of opinion. Evacuation is to be practised so soon as there is good evidence that adhesions have formed between the viscus and parietes sufficient to prevent the pus entering a serous cavity. surgeons, however, look upon this more as a procedure to satisfy themselves that all that is possible has been done, than with any hope that it will materially benefit the patient. Others regard it as decidedly advantageous and often curative. Among these has lately appeared the name of Surgeon-Major M. C. Furnell, of Madras, who, in the Lancet, last December, gave an account of six cases, and some very useful hints in regard to the best way of operating. In this paper I find a very earnest dissuasion from facilitating the evacuation of the abscess by pressure. will be remembered that in the case just given this was employed, and, I think, properly, for the abscess was of such a size and character that I entertained no fear that when emptied it would draw into itself air and the much-dreaded bacteria. More than this, I think, had it been larger, and more disposed to act as an air-pump, I should not have feared to empty it completely; for I would not have hesitated to trust to the straining power of cotton-so often used for this purpose in the experiments of students of spontaneous generation-to exclude all germs. At the same time, upon a priori grounds, I think it would be always advisable to evacuate such an abscess entirely, and if it showed an insuperable tendency to act in this way, to carefully practise upon it the method of hyperdistention so recently advocated by Mr. Callender in this country, injecting into it some bland antiseptic fluid and leaving in it as much as would naturally remain.

In regard to the use of cotton, I must express great faith in its efficiency, founded upon personal observation of its accomplishments, and strengthened by some recent remarks of Mr. Sampson Gamgee, who seems to have excellent reason for believing that scrupulous cleanliness, with cotton dressing, is quite as safe as, and much more convenient than, the complicated antiseptic method of Lister.

The advisability of inserting a tent to

keep open a place of exit for any accumulations is too obvious to need more than mention, nor will it require argument to demonstrate its superiority to a canula or any rigidly patulous tube. The question between a tent and an india-rubber drainage-tube was discussed in the case just narrated, and none of us had any reason to regret our decision in favor of the former.

Another point worthy of mention is in regard to the choice between the use of the aspirator and the plan of opening with a bistoury. Recent experiences seem to indicate beyond doubt that the aspirator is an inadequate instrument for evacuating these abscesses. Its proneness to become clogged, and the immediate sealing-up of the suppurating cavity after its withdrawal, render it unfit for evacuating any but the smallest and simplest abscesses. For this. Furnell (loc. cit.) strongly advocates the employment of a trocar and canula, after cutting through the skin with a knife. He used a good-sized canula, before withdrawing which he pushed through it a tent But I receive the impression, in reading his remarks, that he belongs to that school of surgeons which fears "bacteria" as Europeans of the Middle Ages used to fear "the Turk;" and the method of opening directly with a bistoury, if done with care and a proper regard for cleanliness, recommends itself on the score of simplicity, while it is, in the opinion of some of the best surgeons living, quite as conducive to the safety of the patient as more complicated and so-called antiseptic methods.

In concluding, I cannot omit alluding to the disparity between the amount of pus evacuated and the increased size of the liver at the time the operation was done. This was, as the event proved, due but partly to the proper tumor of the abscess, and also in part to the distention of the whole lobe in which the abscess was situated; so that, when the former was emptied and its damaging influence removed, the latter returned to its normal state without difficulty.

4041 LOCUST STREET.

# CHEMISTRY OF GASTRIC JUICE AND URINE.

BY WILLIAM H. GREENE, M.D.

IT would be no easy matter to discover at the present day any new chemical facts concerning the composition of normal gastric juice or normal healthy urine, and I only propose calling attention to some points that seem to have been forgotten or, perhaps, never learned. It can hardly be expected that medical colleges shall graduate classes of physiological chemists, but it is a matter of some importance that the accuracy of facts shall be well established before they are given to students, many of whom have no facilities for verifying them, or even of consulting recognized authorities.

It is still taught, we hope to only a limited extent, that the acidity of the gastric juice is due to lactic acid. This error was introduced into physiology by Lehmann, and his admirers have followed him blindly, discrediting or ignoring all evidence to the

contrary.

The chemistry of the gastric juice has been thoroughly studied by Schwann, Bouchardat, Claude-Bernard, Bidder and Schmidt, and a host of others. Gastric juice contains two active principles,-free hydrochloric acid and pepsin, -neither one of which is capable of fulfilling the functions of digestion alone, for, while water containing five-hundredths of one per cent. will dissolve certain albuminoid matters, the solution obtained is essentially different from that which results from digestion in a similar liquid containing pepsin. Pepsin manifests its peculiar properties only in acid solutions, and it has been shown that when natural or artificial gastric juice is exactly neutralized by an alkali, it becomes absolutely inactive upon albuminoid The addition of a few drops of matters. acid restores its digestive properties. Many acids may be employed, but all are not equally active: lactic acid is very energetic, and it was supposed to be the acid which exists naturally in the secretion.

That the acidity is due to free hydrochloric acid was first established beyond doubt by Schmidt. He determined the total amount of chlorine in gastric juice, and then the total bases,—calcium, magnesium, potassium, and sodium, and the sulphuric and phosphoric acids, and the ammonia. The sulphuric and phosphoric acids found are combined with the potassium, sodium, etc., and the remainder of the bases are combined with chlorine. The excess of chlorine represents the amount which exists in the form of free hydrochloric acid. The quantity of hydrochloric acid so calculated always corresponds

to the quantity which would be required to produce the acidity of the gastric juice, as found by a direct acidimetric determination.

There is no flaw in this method if the facts be as stated; and they have repeatedly been confirmed by the most able experimenters. The analysis is a difficult one, and could only be undertaken by an accomplished chemist and one who has great skill in quantitative analysis. It is not surprising, then, that any other should have obtained a doubtful result, and, turning to Lehmann's Chemistry, should have deemed it easier to confirm that author's statements. But it seems unpardonable that those fallacious statements should still be taught, since they have been entirely disproved.

It has been objected that when gastric juice is distilled hydrochloric acid does not pass over until the latter stage of the process; but it must be remembered that with albuminoid matters hydrochloric acid forms compounds which require an elevated temperature for their decomposition.

We do not know on whose authority is based the statement that the acidity of urine is due to lactic acid, but it has recently been taught in one of our schools

as a fact beyond question.

Gorup-Besanez is a fair representative of the present state of physiology. (We have reference to the facts of experiment, and not to theory only.) He says, "The following substances must be considered as constant and normal constituents of human urine: water, urea, hippuric acid, uric acid, creatinine, xanthine, indican, calcium oxalate, vesical mucus, sodium and potassium chlorides, alkaline sulphates, sodium-acid phosphate, calcium and magnesium phosphates, small quantities of ammoniacal salts, traces of iron and silica, traces of nitrates and nitrites.

"Small quantities of ammonium oxalate, succinic acid, and traces of glucose have been found in the urine of healthy subjects, but it is not known in a positive manner whether these substances should be considered as constant constituents. The abnormal constituents of urine are albumen, glucose, inosite, lactic acid, and lactates, etc.

"Lactic acid is always present in diabetic urine, but it is but rarely found in fresh pathological urine."

We quote from Gorup-Besanez because

his work is the nearest at hand; other works of physiological chemists make the same distinctions between normal and abnormal urine.

Harley, in his in many respects admirable little book on "The Urine and its Derangements," includes lactic acid among the normal constituents of urine; but Mr. Harley is not a chemist, as is shown by his statement (page 21) that "the acidity of normal urine depends on the united presence of acid phosphate of soda, uric, hippuric, and lactic acids." (Page 120.) "Some think that the acid reaction of urine is chiefly due to the presence of the acid phosphate of soda; but, although it may conduce to, it is not the chief cause

of, the acidity."

Pure uric acid in cold saturated solution is almost without action on litmus paper; its hot aqueous solution produces a wine color with litmus: hence the considerable acidity of urine could not well be ascribed to uric acid. Again, to neutralize the acidity of the twenty-four hours' urine, I to 1.5 grammes of sodium hydrate are required. The entire amount of uric acid eliminated in twenty-four hours rarely exceeds 60 centigrammes (Mehn); Harley gives 75 for a mixed diet. We will suppose 75 centigrammes of uric acid and 30 centigrammes of hippuric acid to be eliminated in twenty-four hours. The former would correspond to 35 centigrammes of sodium hydrate (supposing neutral urate to be formed), and the second to 4 centigrammes. We would still have to account for an acidity equal to  $\frac{61}{111}$  centigrammes of sodium hydrate, by far the greater portion of the total acidity. This acidity is produced by sodium-acid phosphate, as all chemists of eminence admit.

As regards lactic acid, Mr. Harley does not explain himself. We will therefore

quote from other authors:

"The presence of lactic acid has been noticed in urine, not in a state of health, but in certain diseases in which digestion and respiration are much deranged."—
Chimie médicale appliquée aux Recherches cliniques, MEHN.

"The appearance of lactic acid in the urine after poisoning by phosphorus has a certain importance in diagnosis."—

GORUP-BESANEZ.

"Lactic acid does not exist in urine; it has only been found in minute quantities when its formation in the urine has been

permitted, for in time urine may undergo a lactic fermentation, especially if it contain sugar."—RABUTEAU.

CASES OF FOREIGN BODY IN THE ORBIT HAVING PASSED THROUGH THE EYEBALL.

BY P. D. KEYSER, M.D.

FOREIGN bodies in the eyeball are not infrequent cases that come, in this age and region of factories, iron-working, and sporting with shot-guns, before the ophthalmic surgeon; but when found in the orbit, after having passed entirely through the ball, these are of such rare occurrence that when one does appear note thereof should be made. With this fact in view, I present the following two interesting cases that have come under my observation within the past twelve months:

Case I.—Jordan Lawrence, æt. 18, was returning from his work in the mills, at Manayunk, about 5 o'clock in the afternoon of March 2, 1878, and, passing by where there was a match at pigeon-shooting, stopped to look on for a moment or two, considering himself entirely out of the range of the gun; but on turning round to look at the bird as it jumped up from the trap, it flew immediately over towards him, and at the same moment the gunner fired. The shot scattering, he was struck on the ear and side of the nose, and one penetrated the cornea of the right eye, making a horizontal incision, and tearing one-half of the iris from its ciliary attachment.

The same evening he was brought into my office, and I found the eyeball filled with blood, the iris lying in shreds out of the corneal wound, and considerable swelling of the tissue and lids surrounding. Fearing the consequent trouble of sympathetic ophthalmia, enucleation was recommended as soon as the inflammation could be somewhat reduced.

Ice-cold cloths were laid over the eye continually until the ninth day after, when I enucleated the eye, Dr. Todd, of Manayunk, the family physician, kindly administering the ether for me.

After the removal of the ball, it was found that the shot had passed clear through the eye, making its exit about two millimetres externally from the optic nerve, and was encysted in a thickened tissue immediately behind the sclerotica, and attached to the outer capsule and sheath of the nerve (Fig. 1).

Case II.—Michael Holland, æt. 35, of Scranton, Pa., presented himself at my clinic, in the Wills Eye Hospital, on July 30, 1878,

with an obtuse angular wound through the sclerotica, on the inner side of the right eye, a little posterior to the ciliary body, in the space between the superior and internal recti

muscles, he having received the same from a piece of railiron twelve days previously, while cutting a rail with a twelve-pound sledge-hammer, which he was driving on a chisel held by another.



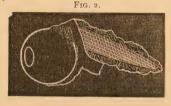
Fig. 1.

and in place, behind which, with the ophthalmoscope, a stria of thick blood could be seen. Vision reduced to perception of light only.

Enucleation was recommended if the foreign body was in the eye, but as he was sure it was a large piece that struck him, and had dropped out, and as there was no inflammation, he determined to wait for further developments. He went home with the purpose to report on the first appearance of any trouble.

On February 18, 1879, he returned with the eyeball atrophied and much drawn in by cicatrization just where the wound was, the lens opaque, and a very slight sympathetic irritation in the other eye. He reported that he has had no pain in the eye ever since the injury, but in November last it commenced to water, and has continued to do so; at the same time the left eye felt a little weak,—that is, he noticed that he could not look at a bright light as well as formerly. This condition of the left eye has not increased any.

Two days after his admission in the hospital the eye was enucleated. During the operation, and after the optic nerve was cut, it was found that the ball would not come out as usual,—that something was holding it through which the scissors would not cut. On feeling with the finger, a foreign body was discovered, which, on removal with the eye, was found to be a piece of iron three-quarters of an inch long, lance-shaped, and a width of nearly a quarter of an inch at the base. It was encysted and attached to the sclerotica and along the outer sheath of the optic nerve (Fig. 2).



After the operation the other eye recovered its normal strength and vision in a few days.

1630 Arch Street, Philadelphia.

#### RATTLESNAKE POISON.

BY J. F. RICHARDSON, M.D.

THE following case, which came under my observation a few years since, is reported from notes taken at the time, with the hope that if any of the *Times's* readers have met with a like singular case, they may be able to give some explanation of the (to me) strange phenomena.

Mr. R., æt. 48, of vigorous constitution, was bitten by a small, black rattlesnake on the second joint of the ring-finger of the left hand, on July 10. Within half an hour he drank one pint and a half of brandy, which under other circumstances would probably have caused almost fatal intoxication, he being strictly temperate in that respect. It, however, produced a slight intoxication, which passed off in a few hours. July 11, the hand and arm was greatly swollen to the shoulder; otherwise the case appeared to be doing well. Thus passed four days, he suffering some cerebral pain and malaise. July 14, he spoke of a feeling of soreness in the flesh of right hip, and on examination a jet-black spot, some two inches in diameter, was discovered, with elevation or thickening of the skin to the extent of about one line; edges well defined. During the next four days this discoloration extended up to a level with the umbilicus, completely around the body and down the lower extremities, disappearing at the toes last, when convalescence was es-

With this (to me) strange discoloration, which was at all times jet-black and solid (not spotted, as is sometimes observed after this class of toxæmia), came on great prostration and death-like sickness,—so great that syncope would occur on assuming the erect position. The treatment, after the first alcoholic stimulation, was wholly tonic and alimentative. Result, recovery.

Query, what gave rise to the discoloration? Was it an erysipelas, and the discoloration caused by the action of the poison on the pigmentary matter? If so, how?

HARPER, IOWA, March 10, 1879.

SIR WILLIAM JENNER has retired from the post he has filled for nearly thirty years at University College and Hospital. The Lancet says, "Both as a systematic lecturer and as a clinical teacher, Dr. Jenner proved himself without a rival, and all who have listened to him must admit that, for clearness of expression, facility of illustration, and for that highest form of eloquence which earnestness alone can give, he was unsurpassed in England or, probably, in any other country."

## NOTES OF HOSPITAL PRACTICE.

#### EPISCOPAL HOSPITAL, PHILADEL-PHIA.

SERVICE OF LOUIS STARR, M.D.

Reported by Dr. D. J. MILTON MILLER, Resident Physician.

CASES OF CROUPOUS PNEUMONIA OF THE APEX OF THE RIGHT LUNG, OCCURRING IN AN ADULT.

W., æt. 22 years, mulatto, a sailor, of temperate habits, with no specific history, and with a good family record, was admitted to the men's medical ward of the Episcopal Hospital, on December 15, 1878.

Three days before admission, having been indisposed for a short time previously, he had repeated slight chills of about fifteen minutes' duration, pain in small of back and in right mammary region, diarrheea, much thirst, and fever.

When admitted, he complained of frequent rigors, had a hot, dry skin, and a feeble pulse. There was a herpetic eruption on his lips, yellowness and injection of the conjunctivæ, and great drowsiness. His tongue was coated, his appetite impaired, and his bowels regular. There was frequent paroxysmal cough, attended with a scanty, tenacious, somewhat rusty expectoration, and productive of considerable stitch-like pain below the right nipple. Upon examining the chest, the following conditions were found. Left side.— Slightly puerile respiration at apex, with a few sonoro-sibilant rhonchi posteriorly; otherwise normal. Right side.—Anteriorly at the apex, increased resistance on percussion, tympanitic resonance, and cracked-pot sound. Auscultation revealed bronchial respiration and coarse, moist, crackling râles for three inches below the clavicle, corresponding to the area of tympany. In this position, also, there was pectoriloguy and increased vocal fremitus. Beneath the nipple, pleuritic friction-sounds were heard. Posteriorly, moist crackling at extreme apex; over remainder of chest, dry bronchial râles. Heart normal.

The urine was passed freely, was amberyellow in color, and had a specific gravity of 1015; the chlorides were greatly diminished, and a faint trace of albumen was present.

The temperature taken in the axilla at 6 P.M. was 102° F. The patient was placed

upon a soft diet,—milk, beef-tea, and farinaceous preparations; twelve ounces of milk-punch (f3i to f3ii of milk) were ordered per diem; a mixture consisting of sweet spirit of nitre and spirit of mindererus was administered every three hours, and a poultice was applied to the right side of the chest.

December 16, 8 A.M.—There was no change in the physical signs. It was reported that he had slept well all night, and he was still very drowsy. Temperature 103°; pulse 104, full and bounding, and respiration 16 per minute. The pleuting

ritic pain was not so marked.

6 r.m.—Passed the whole day in sleep, occasionally talking quietly to himself; had to be roused to take his medicine and food, but his relish for the latter was increased. When awake, was perfectly rational. Temperature 103°; pulse 108;

respiration 16.

December 17, 8 A.M.—Slept well during the night. Temperature 98.5°; pulse 72, weak; respiration 20. The surface was covered with perspiration, and there was considerable general prostration. tongue was cleaner, and the appetite better. There was much less tendency to sleep. The cough was less troublesome, and the sputa less rusty and tenacious. Dulness had supplanted the tympany at the right apex; cracked-pot sound could no longer be elicited; the respiratory murmur was less bronchial in character; the vocal resonance and fremitus less cavernous; and numerous subcrepitant râles were heard. The fever-mixture was suspended, and gr. xii of sulphate of quinia ordered in divided doses during the day. No other change was made in the treatment.

6 P.M.—Temperature 98°; pulse 68; respiration 18.

December 18.—Rested well during the night. Temperature 98.5°; pulse 64, weak and compressible; respiration 18. Physical signs but little altered. An examination of the urine showed a greatly-increased amount of chlorides and no albumen. A cotton jacket was substituted for the poultice, and gr. v of carbonate of ammonium administered every three hours, in addition to the other treatment.

December 19.—Continued improvement. Tongue clean, bowels regular, and appetite very good. Pulse fuller (68) and temperature 98°. Cough less frequent, with the

expectoration of frothy, somewhat yellow mucus. Pain in right mammary region still present. Percussion showed returning resonance over right apex. Auscultation revealed broncho-vesicular respiration and subcrepitant râles, on deep inspiration, at right apex, Friction-sounds still present beneath right nipple. Over rest of right lung, and on left side of chest, a few sonoro-sibilant rhonchi were audible. The diet was increased.

December 21.—Respiratory murmurs clear and normal at right apex. Slight pain in region of right nipple. General condition excellent. Temperature normal; pulse full and strong.

December 22.—Pain about nipple had disappeared, and the lungs showed per-

fectly normal physical signs,

December 23.—Observation ceased, as the patient asked to be discharged, con-

sidering himself well.

Remarks.—Croupous pneumonia of the apex of the lung, though a proportionately frequent occurrence in young children, is rather unusual in adults. This case is chiefly interesting on account of the very confusing resemblance which the physical signs bore to those of a phthisical cavity when the patient was first examined. Other features of note are the marked and protracted drowsiness, the comparative slowness of the respiratory movements, and the regular course of the pyrexia, the temperature falling, as nearly as can be estimated, on the seventh day of the disease, and remaining normal afterwards.

# TRANSLATIONS.

PHLEGMASIA ALBA DOLENS IN A CHLO-ROTIC PERSON, OCCUPYING THE TWO LOWER EXTREMITIES SUCCESSIVELY — PULMONARY EMBOLISM—CURE.—M. Labat reports the following case (La France Méd., 1879, p. 66): A flower-girl of 17, pale, anæmic, and badly nourished, walked, one day, an unusually long distance. In the evening her right leg began to swell, and by the end of two or three days the thigh of the same side also became swollen. the next week she had several attacks of epistaxis, and twelve days after the first appearance of the swelling she entered the hospital (November 3, 1878). Examination showed anæmia, with a cardiac murmur, loudest over the pulmonary artery,

but also heard at the apex; prolonged musical sound in the vessels of the neck. The right leg was swollen, ædematous, with little pain and no tenderness along the line of the large veins. A careful examination of the viscera of the thorax and abdomen showed no signs of disease which might cause cedema. There was no albumen in the urine. The cedema diminished until November 12; by this time it had about disappeared. On the night of the 12th, however, the patient experienced a pain along the left lower limb, which showed cedema. The next day, fever; pulse 132. Slight pain in the right side of the thorax. The swelling involved the thigh in the course of the next few days. On the 17th the patient was suddenly seized with pain in the chest and a feeling of suffocation, with tumultuous action of the heart and rapid breathing. Physical examination showed only a slight obscurity in the vesicular murmur of the right side posteriorly. The oppression lasted for some hours, but There was dulness finally diminished. over the lower right lobe posteriorly. the succeeding days, all these symptoms. including also pain on pressure over the crural vein, disappeared, and the patient is now well, but anæmic.

HÆMORRHAGICA, CHRONIC PURPURA WITH ALTERNATE SYMPTOMATIC PARALysis.—Dr. F. Cavalie reports the following case (Bull. Gén. de Thérap., 1879, p. 125). He was called to attend a boy to years of age, rather stout, and apparently well nourished, who, after having had headache for three days previously, was suffering with slight fever and loss of appetite. The next day the little patient had abundant epistaxis, lasting all day and part of the night, and coming on at intervals. The day following, the patient appeared almost exsanguinated; no headache; persistent fever; paralysis of the right upper eyelid, with external strabismus, and left hemiplegia; slight anæsthesia of the paralyzed parts; tendency to somnolence; purpuric patches over the surface generally, and particularly on the front of the chest. Cavalie concluded that the paralytic symptoms were due to ecchymosis in the brain, and gave a rather favorable prognosis. Astringents and iron were ordered, under which the condition of the patient improved, until at the end of a month his general condition was quite fair. He began to be able to open the eye, though the limbs con-

tinued in a paralyzed condition. Twelve months after the patient was first seen, his general condition was very good; the paralytic symptoms had almost entirely ceased, and the patient was able to drag himself about supported on canes; strabismus persisted. He had been under tonic and ferruginous treatment steadily. Purpuric patches continued to show them-Cold affusions were now added to the internal medication with great benefit, and after a long time-several years-all the paralytic symptoms disappeared; only the strabismus remained. Nevertheless, during all this time, and up to the date of Dr. Cavalie's communication, six years after the original attack, fresh patches or crops of patches of purpura continued to make their appearance from time to time. Dr. Cavalie has been unable to find a case of purpura so chronic as this, and desires to record it for that reason.

SYNDACTYLITIS - SUCCESSFUL OPERA-TION.—Gyergyai reports the case of an infant of 5 months, in whom the third and fourth fingers of each hand were joined together, not by a membrane, but by their entire thickness. Gyergyai operated after Lister's method, cutting between the fingers to their base, under salicylic- and boracic-acid spray, and using Esmarch's bandage, and, after the operation, approximating the edges of the wounds by sutures. The two fingers were then covered with a muslin bandage, and the whole hand covered with cotton batting impregnated with salicylic acid. By the end of the fourteenth day cicatrization was complete, and the bandages were removed. The operation was a great success.-Le Mouvement Méd., 1879, p. 80; from Cbl. f. Chir.

THE rates of mortality in the principal foreign cities, according to the most recent weekly returns, were, in Calcutta 50, Madras 42, Paris 27, Geneva 26, Brussels 36, Copenhagen 23, Stockholm 22, Christiania 23, St. Petersburg 46, Berlin 27, Hamburg 27, Dresden 26, Breslau 28, Munich 33, Vienna 30, Buda-Pesth 39, Rome 30, Turin 34, Alexandria 34, New York 27, Brooklyn 21, Philadelphia 21, and Baltimore 23, per 1000 of the various populations.

THE Trustees of Rush Medical College have appointed Prof. William H. Byford, A.M., M.D., of Chicago, Professor of Gynæ-

cology.

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# PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, MARCH 29, 1879.

### EDITORIAL.

JOHN MAYNARD WOODWORTH.

IN our editorial of last week, the actions of Supervising Surgeon-General Woodworth during the last winter were the subject of comment. When the editorial was penned, Dr. Woodworth was supposed to be suffering from a slight attack of facial erysipelas, but before the mails had carried the journal to subscribers, a sudden increase of his illness occurred and rapidly carried him off. He was born in Chemung County. New York, in 1837, but spent his youth and received his education in the State of Illinois. His early manhood was devoted to the pursuit of natural science, but in 1862 he graduated in medicine, and immediately entered the volunteer medical service, in which he rose to be Medical Director of the Army of the Tennessee. In 1871 he was placed at the head of the Marine Hospital Service, which, under his management, has been reorganized and much improved in efficiency. Dr. Woodworth was the author of various reports and papers, most of them upon topics connected with his department, but he has left very few memoirs of permanent value. He was essentially a man of action, and his important articles were chiefly of a character to induce action rather than to add to the stores of human knowledge.

In our recent editorial, we did not mean to magnify the Public Health Association at the expense of physicians not connected with that organization who were active in securing proper health legislation. Medical men, both within and without the District of Columbia, were so powerful that it would be impossible to unravel the influence which led to the final triumph.

### PROCEEDINGS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF PHILA-DELPHIA.

THURSDAY EVENING, JANUARY 23, 1879.
THE PRESIDENT, DR. H. LENOX HODGE, in the chair.

Tumor of the brain. Presented by Dr. CHARLES K. MILLS.

M. T., æt. 35, white, female, in 1875 had secondary syphilis. During 1876 she began to have spells of giddiness and staggering, and frequently-recurring general headache. January 7, 1877, she went to bed with a terrible headache, and three days later became paralyzed on the left side. She was confined to her bed for a month. Her bowels and bladder were paralyzed for three weeks. Double vision came on with the paralytic attack, and remained for several months. During the year from January, 1877, to January, 1878, when she came under my care, she had continued in about one state, as regards her general health. Her headache had ceased, and her hemiplegia had improved slightly, apparently under the use of iodide of potassium, which she had taken steadily.

Her condition was noted in January, 1878. She had left facial paralysis. She could not corrugate the left side of the forehead, nor close the left eye. She had left internal strabismus. The lower part of her face was drawn to the right, and her tongue, on protrusion, deflected in the same direction. Her enunciation was a little imperfect, but she was not aphasic. The uvula and soft palate turned slightly to the right. The left arm was paralyzed, and was carried semiflexed at the elbow. She could barely manage to elevate the entire limb to a horizontal line. With the left hand she could mark on the dynamometer 5°, with the right 35°. left lower extremity was also paralyzed. When she walked, the left foot, which was kept turned outwards, was lifted from the floor with an effort of the entire limb, and came down again heavily. Farado-contractility was retained, but diminished, in the face, arm, and leg of the left side. Sensibility was diminished in the leg, but not in the face or arm. Hearing was impaired on the left side. Taste was preserved. Smell was defective, but the comparative condition of the sense on each side of the median line was not deon each side of the median line was not determined. She was easily excited and irritated. She had full control of her bowels and bladder. The right half of the body gave no evidences of true paralysis, but she seemed a little deficient in strength in the

right arm and leg.

From January to August, 1878, but little positive change took place in the patient's condition. She went about the ward, and sometimes out of it, for a short time. She

tired very easily, and often went to bed for an hour or two during the day. On the whole, her paralytic symptoms improved slightly, so that she seemed to gain a little more power in the ocular muscles and in the arm and leg. The improvement, how-ever, was not decided, not as marked as is seen in many old cases of hemiplegia under treatment. Iodide of potassium, in doses of ten or fifteen grains three times daily, was given almost continuously. No iodism was produced by the drug; and she said that she always felt better while taking it. She seldom complained of headache; but once in several weeks she would have an attack, which would last for a few hours. She thought that her head got worse when she did not take the iodide. Occasionally bromide of potassium and mild tonics were administered. Her bowels were carefully regulated by means of laxatives and purgatives. As her paralysis, during the period to which I am alluding, was not accompanied by irritative symptoms of any moment, electricity, both in the form of faradism and galvanism, was cautiously applied at intervals to the palsied muscles.

On the 26th of August she began to suffer with headache. Later, on the same day, vomiting set in, occurring at frequent intervals. Her bowels were constipated. A cathartic and bromide of potassium were ordered, and mustard derivatives were used to her feet, calves, and nape of the neck. Her headache increased, becoming agonizing, and she vomited frequently for two days and nights. On August 29 she became semiconscious, and lost control of her bowels and

bladder.

She began to perspire all over, but the sweating was much more marked on the right side than on the left. This tendency to unilateral sweating was first observed by the nurse August 30; and it was also noticed on the afternoons of August 31 and September 1, and on several subsequent occasions.

On the 30th of August her left eye began to inflame. Dr. E. O. Shakespeare, ophthalmologist to the Philadelphia Hospital, who took charge of the patient's eyes, has furnished me with the following notes made

early in September:

"The left eye showed paralysis of the orbicularis palpebrarum and external rectus, and great congestion of the bulbar and palpebral conjunctiva, with a muco-flocculent discharge. The conjunctiva and cornea were insensitive, and there was necrosis of the lower portion of the latter. The iris and deeper parts were not sensibly involved. The right eye presented a normal appearance on external examination; its movements were unimpaired. Vision, as roughly tested, was good in this eye, but was not accurately measured. She had perception of light in the left eye. The ophthalmoscope showed the media of the

right eye clear, the outline of the optic disk moderately distinct, the central arteries a little contracted and bordered by a narrow, frosty streak, the veins about normal, the level of the disk about as usual, the papilla of a dirty reddish-yellow, more intense near the borders, and opaque. The retina and macula lutea were not much changed. The fundus of the left eye could not be seen."

When she passed into the semi-conscious or apoplectic state, on the 20th of August, the motor paralysis of the left side became more pronounced, the face, arm, and leg becoming completely helpless, and the loss of power in the ocular muscles more marked.

On September 6 she began to have some difficulty in swallowing, which lasted for a few days. Fluids would be partly regurgitated. The same day, on attempting to feed her, she had a slight convulsive twitching or spasm of the muscles of the mouth, and of the hands and arms, and on two or three occasions subsequently, similar spells were observed. She never, however, had a well-marked convulsion, either unilateral or general.

For four weeks she remained in a low, helpless condition, sometimes rallying a little. Some paralysis seemed during this time to take place on the right side of the face and

body.

On September 27 she showed decided signs of amendment, her pulse, temperature, inflamed eye, and general condition improving. She now complained greatly of pain in the left arm and leg, particularly on moving or handling them. The left knee-joint was especially painful. Both the left arm and leg were hyperæsthetic. She cried and worried. She talked very indistinctly, but by attentively listening much that she said could be understood. She regained control of her bowels. She continued somewhat better for four weeks, but varying considerably in her mental and physical condition from day to day.

On the 30th of October she became much worse, losing power on both sides of the body, and having involuntary passages. Her articulation became so low and indistinct that she could not be understood. She moaned almost continuously, and indicated that she had severe pain in her left arm and leg. She had some muttering delirium. She retained sufficient sight in her right eye to recognize faces and follow the movements of those around her up to a few days before her death, which occurred, from exhaustion, November 18, 1878. Symptoms were treated, and every effort was made to sustain her strength and prolong her life.

A post-mortem examination was made twelve hours after death. No cicatrices, extravasations, or unusual appearances were observed in the soft parts covering the skull. The left eye was found to be turned inwards, slightly more than the right; and the lower two-thirds of the left cornea showed opacity and ulceration. A scar about three inches long, and one to one and a half inches wide, was present on the inner side of the left tibia. The skull-cap and dura mater were normal. The pia mater presented nothing abnormal, except a small area of injection and cloudiness about the middle of the parietal lobe. The cerebral substance on the upper surface of the brain was of average consistence.

The brain was removed from the cranial cavity with care, and was immediately turned over, so that the base could be first examined.

The dura mater and floor of the skull showed no evidences of disease or injury, the various fossæ, grooves, fissures, foramina, sinuses, ganglia, nerves, etc., having been

examined as far as possible.

The base of the brain was remarkably distorted. Parts which are usually arranged symmetrically on each side of the median line seemed to have been pushed or dragged to the right. The right olfactory bulb was twisted out of position, so as to point obliquely at a considerable angle from left to right. The optic commissure and cut nerve-ends were swollen, and, with the corpora albicantia, were to the right of the middle line. How much of the distortion had occurred during or after removal of the brain from the skull could not, of course, be determined.

Just in front of the optic chiasm, the ends of two hard, pinkish-white nodules were seen, constituting what might be termed a twintumor. These masses were cuboidal in shape, and of about the same size, the sides of each measuring about two-thirds of an inch. They lay side by side, being distinct bodies, but were lightly bound together at their upper edges by thin fibrous bands. They were imbedded in, but readily separable from, the surrounding brain-substance, and did not appear to be connected with either of the membranes. They extended across the median line. On cutting into them they were found to be firm and uniform in consistence, but not difficult to incise.

The size and relations of the regions of the base of the brain in the location and neighborhood of the neoplasms were much altered, but they were so situated as to have apparently more or less involved in their growth the basal termination of the corpus callosum, the peduncles of the corpus callosum, the lamina cinerea, and anterior perforated spaces. They also probably encroached upon the roots of the olfactory nerves, the optic lerves and commissure, and the anterior portions of the

circle of Willis.

The base from the posterior line of the tumor backwards to the pons was softened; optic nerve-ends, commissure and tracts, and the parts included in the interpeduncular space, actually melting away during the examination. The visible portions of both

crura cerebri to within a few lines of the pons were softened, but not so diffluent as the interpeduncular bodies. The inner portion of the floor of the right Sylvian fissure, and the inner two-thirds of the island of Reil, were softened. The right temporo-sphenoidal lobe had the appearance of being lifted up or thrust away from the fissure. The circle of Willis seemed to have been broken by the obliteration of its anterior branches. The right middle cerebral artery appeared to have no connection with the vessels in front. On the left, the posterior cerebral, posterior communicating, internal carotid, middle, and anterior cerebral, were joined, but much bent out of their usual courses.

The third and fourth nerves were in position, but distorted. The pons, medulla oblongata, and cerebellum were normal in consistence and appearance, but somewhat out of line, in correspondence with the dislocation

of the entire base.

Examination of the convolutions, both of the base and of the superior and lateral surfaces of the brain, revealed nothing abnormal.

On cutting into the lateral ventricles, a condition of distortion, equally remarkable with that at the base, was observed. The right corpus striatum and right optic thalamus appeared to bulge considerably, being above the level of the corresponding bodies on the left side. The third ventricle, instead of being a narrow, oblong fissure in the middle line, was wide, shallow, nearly square in outline, and twisted on its axis towards the left, A little fluid was found in the posterior cornua. The choroid plexuses were normal in appearance. Just in front of the distorted third ventricle, the top of one of the tumor masses could be seen.

The right lung was bound to the chest-walls by strong pleuritic adhesions. Within the middle lobe of the right lung was a hemorrhagic infarction, which was very hard, of a dark-red color, and about as large as a small lemon. Two spots of consolidation were also found in the right middle lobe. No valvular or other lesions were discovered on examining the heart. Liver, stomach, spleen, and kidneys showed no gross appearances of interest.

The eyes, with the attached portions of the optic nerves, were removed, and have been examined by Dr. Shakespeare, who reports

as follows:

"Thin sections of the anterior third of the left eye showed the ciliary body and iris normal. The corresponding sclera also was free from infiltration. The pericorneal conjunctiva was inflamed below and congested above the cornea. The cornea itself, commencing at the junction of the upper with the middle third, was softened throughout two-thirds of its depth. Over this area the anterior epithelium, and the middle and outer layers of the fibrous tissue

of the cornea, were represented by a mass of embryonal cells, closely packed together. The posterior layers of the cornea were comparatively free from irritation. This condition of the cornea, commencing at the upper border of its middle area, extended down to the lower rim of this membrane. Over this extent its thickness was not much more than one-half that of its upper third, the loss falling mainly on the anterior layers. Corresponding portions of the right eye were normal

"Longitudinal sections from both optic nerves at their entrance into the globes were made and stained with carmine. The sections included a half-inch of the anterior ends of the optic nerves, the optic disks, and a small portion of the surrounding retina. Under the microscope it was found that the sclera and choroid were apparently normal. The subvaginal space surrounding the nerve was not unduly enlarged; neither was there much proliferation of the connective tissuebundles which are usually found in this The fibrous bands of the lamina cribrosa were much more abundant than normal, and were increased in thickness. anterior layers of these bands were curved forward, so that they were located far in advance of their normal position, and the connective-tissue-cells upon them were more numerous and more swollen and granular than usual. The level of the surface of the optic papilla was not advanced; neither was the commencement of the granular layers of the retina much removed from the border of the scleral ring; nor were the nerve-fibres of the disk and retina swollen or degenerated. The capillaries here, however, were more numerous than usual, and their walls were slightly irritated. In the fusiform and irregular spaces between the nerve-fibres were small accumulations of embryonal cells. This cellular increase was more marked just within the border of the disk, and it extended backwards a little posterior to the level of the lamina cribrosa. The large arteries were seen to have their walls slightly thickened and their lumen a little contracted. veins were not much changed and were not unusually distended.

"The condition of the optic nerve posterior to the lamina cribrosa was peculiar. Between the bundles of nerve-fibres was a very slight increase of cells in the lymph spaces, yet the bundles were not atrophied or unusually lessened in diameter, nor was the connective tissue between them increased in quantity. The vessels were not abnormally numerous or softened. Concerning the condition of the nerve-bundles themselves the following appearances were marked. At the posterior end of the sections, the presence of the socalled amyloid corpuscles in the thickness of the nerve-bundles was very frequent. Often several of these would form accumulations,

which would substitute the nerve-texture for more than half the diameter of a bundle of nerve-fibres, and destroy the continuity of the bundle to that extent quite as effectually as would the cut of a knife. No other degeneration of the nerve-bundles could be made out. This alteration of the bundles gradually subsided in proportion as the lamina cribrosa was approached, until near the latter it had entirely disappeared. The foregoing notes upon the condition of the optic nerves and papilla apply equally well to either eye."

Remarks.—This case simulated in many respects one of tumor, or other limited lesion, in the anterior part of the upper half of one lateral region of the pons varolii. The symptoms of circumscribed disease of this area, as given, for instance, by such authorities as Gubler, Brown-Séquard, Bastian, Nothnagel, and Seguin, are those of paralysis of both face and body upon the side opposite to the lesion. It is well known that in typical cerebral hemiplegia, that, for example, produced by affections of the main cerebral ganglia, facial paralysis is very incomplete; in particular, those branches of the facial nerve which supply the frontalis, corrugator supercilii, and orbicularis palpebrarum muscles escape. In hemiplegia from disease of the pons, however, the facial paralysis is usually well marked; and this is true whether the case be one of the so-called alternate hemiplegia from lesion of the anterior portion of the lower half of one lateral region, or one of unilateral paralysis of face and limbs of the same side from an affection of the upper half. Involvement of the orbicularis palpebrarum is considered an especially important feature of disease of the Brown-Séquard, for instance, in one of the lectures so frequently delivered and published during the last few years, says that paralysis of the orbicularis palpebrarum, when central, occurs almost exclusively in cases of disease in the pons varolii.—(New York Medical Record for January 19, 1878.)

The internal strabismus from paralysis of

the abducens or sixth nerve might also, perhaps, have been regarded as pointing to disease of the pons, as this form of palsy sometimes, although not commonly, accompanies the paralysis of the portio dura from central disease. The patient also suffered at an early period from slight, and later from very marked, difficulty in enunciation,-a symptom which Leyden has called anarthria, which is due to a paresis of the hypoglossal nerve, and is supposed to be characteristic of lesions of the pons and the medulla oblongata. Emotional weakness, anæsthesia of the leg, late implication of the trigeminal nerve, with apparent spreading of the paralysis to both sides of the body, might also, in connection with the other points referred to, have seemed to indicate a tumor of the pons.

While, however, the symptoms enumerated rendered the diagnosis of a localized lesion of

the pons at first sight highly probable, a closer study of the case during life afforded some points which made me doubtful as to the region affected. Conjugate deviation of the eves and neck in disease of the pons generally takes place towards the paralyzed side of the body; in lesions elsewhere, the deviation is usually towards the side of the injury in the brain. This symptom was absent altogether during the time the patient was under my care. In a disease of the pons of such long standing as the one under consideration, convulsions would be likely to occur sooner or later. The urine was examined and found to contain neither albumen nor sugar, which are said sometimes to be present when lesions of the pons, either directly or by pressure, cause irritation of the floor of the fourth ventricle.

It must be remembered also, in discussing this question of the probability of the symptoms present in this case leading to the diagnosis of a disease of the pons, that the symptoms supposed to be pathognomonic of a lesion of this part, have been proved by clinical and pathological observation not to be so absolutely. A few cases are on record, for instance, in which the upper fibres of the facial nerve have been paralyzed as the result of a lesion situated in the brain, above the pons and cerebral peduncles. Chvostek, quoted by Nothnagel (Ziemssen's Cyclopædia, vol. xii. p. 118), describes a case in which disturbances of speech and a feebleness of the extremities on the left side, present at first, disappeared almost entirely after a few days; on the other hand, the left facial nerve remained almost completely paralyzed (even the branch to the orbicularis palpebrarum), and the autopsy disclosed the presence of a hemorrhagic cyst in the right nucleus lenticularis. The following explanation of cases of this kind is given

by Nothnagel (op. cit., p. 147):

"When the tract of nerve-fibres passing along the base of the nucleus lenticularis, designated as the ansa peduncularis (Hirnschenkelschlinge, Gratiolet, Meynert), is involved in the lesion, the character of the symptoms is somewhat different from that described. The most noticeable difference seems to be that in this case the fibres of the facial nerve supplying the frontalis and the orbicularis palpebrarum, which otherwise escape, are paralyzed like the rest, as in an instance re-

ported by Huguenin.'

The inflammation, ulceration, and sloughing of the left cornea, with the accompanying insensibility of the conjunctiva and cornea of the same eye, are matters of great interest, both to the neurologist and ophthalmologist. The present makes the second case in which I have observed inflammatory, trophic, and anæsthetic phenomena in the eye, in connection with tumors located in the anterior regions of the brain.

The Casserian ganglion and its branches did not appear to have been directly pressed

upon by the growths. These were, in fact, protected by being on a lower level, and by the peculiar conformation of the skull in this region. The base of the tumor was apparently on the level of the anterior fossa and the surface of the body and lesser wing of the sphenoid bone, and was therefore separated by position and by bony processes from the nerves and ganglion in the cavernous sinus and Casserian depression. Both the carotid and cavernous plexuses of the sympathetic nerve, however, communicate with each other, and with branches of the fifth nerve. The cavernous plexus is also connected with the ophthalmic ganglion. Filaments from both plexuses are distributed to cerebral and ophthalmic vessels, and must have been directly affected by the neoplasm.

The extensive softening of the base of the brain present in this case is worthy of atten-The softened tissue had much the appearance of the milky-white softening which, after the lapse of a long time, some-times takes the place of yellow softening. Much of the softening must, however, I am inclined to think, have occurred during the last few weeks, or even days, of the patient's life. Although the softening which occurs around adventitious products is commonly considered to be inflammatory, I do not believe it to have been of this character, at least not entirely so in the present instance. Obliteration by pressure of the vessels which constitute or are given off from the anterior portion of the circle of Willis would better account for the process.

Extensive observations in general and cerebral thermometry were made in this case, but these will be reserved for another communi-

cation.

Report of the Committee on Morbid Growths.

—"The specimen presented by Dr. Mills proves upon examination to be a syphilitic new formation (gumma), histologically consisting of embryonic cells, round and fusiform in shape, imbedded in a granular fundamental substance. These elements are very distinct at the periphery, while at the centre of the growth they are indistinct and constitute a granular débris. At the periphery, also, are seen numerous blood-vessels having well-defined walls; in the lumen of many are found the red corpuscles of the blood.

"February 27, 1879."

Glioma of pons varolii.

Dr. WILLIAM PEPPER, who had seen the patient during life, presented the specimen, with the following history, based on the notes

by Dr. T. V. CRANDELL:

M. A., æt. 5, a very healthy boy, became affected in July, 1878, with internal squint of left eye, and nightly paroxysms of excessive silly laughter. Two weeks later, slight paralysis of the right arm was noticed, which gradually increased and became associated with rigidity. This was soon followed by

weakness of the right leg, which increased until loss of power was nearly complete, and was attended with rigidity. During sleep, however, both arm and leg became relaxed. Difficulty in deglutition appeared early, and increased. There was paralysis of the left orbicularis palpebrarum and of left external rectus muscles; but the muscles of forehead and of face were not involved. The tongue was protruded straight, and could be moved from side to side, but not freely. The sensibility was not impaired at any point. Electromuscular contractility was present in all the paralyzed muscles. Speech was lost, apparently from difficulty in articulation. Intelligence was perfectly preserved till near the close. Sight was good in both eyes. of smell and taste was good, as he objected to the taste of medicines, and had decided preference for certain kinds of food. Difficulty in swallowing increased, so that fluids were regurgitated through the nostrils; nutrition was, however, well kept up. In November he suffered from intense headaches, and frequent attacks of palpitation of the heart, with flushing of face and injection of left conjunctiva, and with increased rigidity of right arm and leg. There was temporary improvement in the state of the muscles of left eye, apparently due to the use of faradism. Death occurred from paralysis of the pneumogastrics on 20th The post-mortem examination November. was limited to head. Calvaria and dura mater normal. The sinuses were healthy. There was some congestion of arachnoid. About fziv clear serum escaped from the base of the brain. The ventricles of the brain were enlarged and distended with serum. All parts of the brain-tissues were healthy, excepting the pons, which had undergone gliomatous transformation. At first sight there appeared to be merely an irregular enlargement of the pons, as there was no distinct separable neoplasm. It measured 2.3 inches in transverse diameter and 1.5 antero-posteriorly. By its enlargement it had encroached somewhat on the cerebellum, which was compressed or hollowed out, particularly in the region of the left pneumogastric lobule. On section, the pons presented a smooth, glistening, homogeneous structure, resembling to a considerable degree the normal white substance of the hemispheres. It was less striated in appearance than the normal tissue of the pons, and had at the same time a more gelatinous or translucent appearance. Its consistency was quite firm on the right side; but on the left side there was hemorrhagic infiltration, with central cystic softening.

On microscopic examination, thin sections through the right half of the tumor, carminetinted, exhibited an infiltrate of small, round, and oval cells imbedded in a finely granular matrix. A few larger cells, epithelioid in appearance,  $\frac{1}{1000}$  of an inch in one diameter and  $\frac{1}{2000}$  in another, were also seen.

Sections from the centre of the tumor exhibited similar appearances. Sections through the left half of the tumor exhibited the same elements, obscured in places by numerous blood-corpuscles, which infiltrated this portion of the growth.

Remarks.—The existence of a tumor, probably of the pons, was clearly recognized before death. No cause could be suggested, unless repeated falls on the head might have induced it. There was no suspicion of inherited syphilis. The treatment throughout was by iodide of potassium and bichloride of mercury. A faradic current was applied to the paralyzed muscles, and a mild galvanic current was repeatedly used on the head.

Epithelioma of nasal fossa invading sphenoid and ethmoid bones and membranes of brain. Presented by Dr. Wm. Pepper.

Mrs. W. had suffered for several years from post-nasal catarrh, when, in 1876, at the age of 73, she consulted me, and on examination I found enlargement of tonsils and granular pharyngitis. Six months later (April, 1877), she first noticed a sense of fulness in the right side of the throat, causing frequent efforts to remove the obstruction, which brought away some muco-sanguinolent discharge from post-nasal space. The voice was a good deal affected. These symptoms had lasted a month before I again saw her, when examination showed that there was a rounded bulging downwards of the posterior part of the soft palate. On palpation it was firm and elastic. The finger passed behind the soft palate distinguished a rather firm, smooth, rounded growth springing by sessile base from outer wall of right nasal cavity and attached to soft Various applications were made to posterior surface of the growth by means of bent brushes, but without effect. I then resorted to interstitial injections of solutions of ergotin, administered by passing the needle of the hypodermic syringe through the soft palate into the polypoid mass. Five grains were given each time, and the injections were repeated every three days for two months. This treatment was certainly followed by benefit. The sanguineous discharge ceased, the bulging of the soft palate diminished, and the sense of obstruction was lessened. She left the city in June, treatment was discontinued, and I did not see her till the end of September, when I found that during summer the nasal growth had increased, and that there had also been severe pain extending through the right side of the head. She had lost flesh and strength. There was marked increase in the deafness on right side, and she also complained of dimness of vision of right eye. The pain in head soon became incessant and violent, and the mental powers began to fail. The muscles of the right eye became partially palsied (see full account below), vision was apparently almost lost, and hearing entirely so on the right side. Dr. E, O. Shakespeare, who visited her in consultation on November 15, has furnished the following note

of the conditions of the eye:

"There was partial paralysis of the levator palpebræ superioris and of the orbicularis of the right eye, so that the upper lid could be only partly raised, and the lids could not be entirely closed. The lower margin of the cornea of this eye and the bulbar conjunctiva below were not covered during attempts at closure. There was complete paralysis of the external rectus of the right eye, and possibly a very slight paresis of the muscles supplied by There was the third nerve of this side. lessened sensibility of the integument of the right half of the face, as also of the conjunctiva and cornea of the right eye. cornea was extremely hazy, particularly its lower half, where the anterior epithelium was opaque and slightly desquamating. The conjunctiva, both palpebral and bulbar, was in an acute catarrhal condition. The pupil was about normal, as was also the tension of the Vision of this eve was so much eveball. reduced that she could with the greatest difficulty count fingers at one foot. In consequence of the haziness of the cornea it was impossible to obtain a distinct view of the fundus. and the condition of the nerve could not be definitely determined by the ophthalmoscope.

"The muscles of the lids and globe of the left eye were not perceptibly affected, nor was the sensibility of the skin, conjunctiva, or cornea appreciably blunted. The media were clear; the iris was normal in color and texture, and was somewhat sluggishly responsive to varying quantities of light. Acuity of vision in this eye was a little subnormal, and the visual field was sensibly narrowed concentrically. The ophthalmoscope showed the optic disk sharp-bordered and a little irregular in outline,—the irregularities being due to interrupted deposits of black pigment in the choroid ring and the edge of the disk. There was a deep and wide central physiological excavation of the head of the nerve, showing very distinctly at the bottom the glistening lamina cribrosa through which the central retinal vessels were observed to pass. The calibre of the retinal arteries was considerably narrowed and their perivascular sheath was unusually thick and distinct, being represented by a yellowish-white, frosty streak on either side of the blood-stream, of a width frequently quite equal to that of the latter. These vessels were not abnormal in their course.

"The large retinal veins also showed some of the same frosty bordering, but by no means so extensively. They were moderately full of blood, and were a little more wavy than usual, especially at a distance from the disk.

"The color of the whole of the surface of the optic disk between the previously mentioned central excavation and the choroid ring presented a dirty red-gray tint, and did not offer its usual semi-translucence. The general level of the disk appeared to be a little below that of the surrounding retina.

"In the vicinity of the disk the retina appeared slightly striated, and scattered among the nerve-fibres were to be seen considerable numbers of minute, yellowish-white, opaque points and streaks.

"In the neighborhood of the macula these points became a little more numerous, but in this position their disposition was not at all radial. The same general character already mentioned for the blood-vessels of the nerve was to be seen, although less markedly, in the retinal vessels.

It was necessary to keep her continually under the influence of morphia, which was effectually done by means of hypodermic injections. She gradually sank into a state of mild dementia, in which she would partly arouse from the influence of morphia only to resume incoherent expressions of suffering. Death occurred December 15, 1877.

Dr. Shakespeare has also presented the following report of the post-mortem and micro-

scopic examinations.

Autopsy.—" The brain only was examined. The external appearance of the cranial vault was not at all abnormal, nor was the thickness or color of the calvaria. The dura mater was readily separated from the inner surface of the bone upon the vault and sides of the cranium. Its tension was not unusual, and upon the convexity it presented nothing abnormal.

The longitudinal sinus was partly filled with fluid and recently-clotted blood. Along the longitudinal median fissure this membrane was considerably adherent to the pia mater. The pial covering of the convexity of the cerebrum was possibly very slightly thickened. The Pacchionian bodies were somewhat prominent. The large vessels were moderately full of dark fluid blood, and presented no appearance of alteration. removing the brain it was found that at the inner portion of the bottom of the right middle cerebral fossa, the membrane and the cerebral substance itself were firmly fastened to the base of the skull. Over the area of an inch at the apex or inner portion of this fossa, the greatly thickened dura was so firmly adherent to the bone that it could not be separated at this point. Here also the dura and pia mater were intimately united together and fastened to the corresponding cerebral substance, which was at this point indurated to the depth of a quarter-inch.

"This adhesion and thickening of the dura mater corresponded in location to the space on the floor of the fossa, between the foramina rotunda and ovali and the position of the right cavernous sinus, which latter was partly included within the thickened membrane. It reached anteriorly to the edge of the sphenoidal fissure, and posteriorly as far

as the foramen lacerum medium.

"The dura was not unduly adherent to other

portions of the base of the skull, nor were there abnormal adhesions between the dura and pia mater other than those already mentioned.

"Viewing the inferior aspect of the brain, it was observed that the large vessels were not visibly altered. The right optic tract was slightly narrower than its fellow of the opposite side, but there was no marked difference in the size of the intracranial portion of the

two optic nerves.

"The pial covering of the base was slightly cloudy, but not at all roughened, nor, except in the immediate vicinity of the already-described adhesion, was there any indication of inflammatory exudation. Beyond the neighborhood of the before-mentioned adhesion, the pia mater of the base was not unduly congested.

"Upon slight pressure some clear colorless

fluid welled up from the infundibulum.

"An examination of the cortex of the brain revealed nothing unusual other than the previously-mentioned point of induration. There was a drachm or two of colorless serous fluid in the lateral ventricles; otherwise there was no naked-eye evidence of disease in any part of the cerebrum, cerebellum, pons, or medulla.

"Inspection of the base of the skull from the cranial cavity showed the cribriform plate of the ethmoid bone greatly softened. The whole of the body of the sphenoid and the anterior part of the basilar process of the occipital bone were in a similar condition. The softening had so far advanced that they were easily removed by a small scalpel, which could be plunged into them with as little resistance as would be offered by a piece of cheese.

"The cranial surface of these bones was nowhere the seat of fungous projections. There was not even abnormal alteration in level of the superficial part of these bones. The right ala majora of the sphenoid had undergone some softening near its junction with the body. So also had the apex of the petrous portion of the right temporal bone. The surface of section of the softened body of the sphenoid bone offered a grayish, opaque, granular aspect, and no juice exuded from it after moderate pressure.

"After breaking through the roof of the orbit, the posterior two-thirds of each eye, with its corresponding optic nerve, was removed and placed in a hardening agent. To the naked eye there did not appear to be an invasion of any of the tissues within either orbit.

"Microscopic examination of the eyes.—After hardening in picric acid a portion of the posterior of each eye, comprising the entrance of the optic nerve, some extent of the retina and ocular membranes and the optic nerve itself for a half-inch of its extent was properly prepared, and cut into thin sections, which were longitudinal to the axis of the nerve and vertical to the surface of the retina.

Nearly all the sections thus obtained were examined, but the four central cuts from each eye were mounted and more particularly studied. The latter showed the central vessels in some part of their course both anterior and posterior to the lamina cribrosa.

"Right eye.—The optic papilla was slightly swollen, and the granular layers of the retina did not begin at the margin of the choroid ring, but at a considerable distance beyond The veins and capillaries of the papilla and adjoining retina were a little distended. and their walls were thicker than usual. arteries of the retina possessed a small contracted lumen and much thickened walls. Of the two large arteries of the papilla, one, near the lamina cribrosa, was nearly occluded by the apex of a blood-clot which extended backwards in the central artery behind the lamina cribrosa. The connective tissue between the nerve-fibres and that ensheathing the vessels of the papilla and adjoining retina was somewhat increased and slightly infil-trated with embryonal cells. There were no extravasations of red blood disks. The integrity of the nerve-fibres did not appear to be affected to any considerable extent. The lamina cribrosa was more dense than usual, and thicker from before backwards. In the large central artery behind the lamina lay the continuation of the blood-clot, whose anterior apex partly occluded one of the large arte-This blood-clot was ries of the papillæ. more or less fusiform, and extended nearly as far back as the entrance of the central artery within the nerve. Its diameter was about half that of the lumen of the vessel within which it lay, and its constitution indicated that it had been formed some time anterior to death, for many of the red corpuscles which it included had commenced to undergo granular degeneration. It was slightly adherent along one side of the arterial wall, where it had excited an irritation of the cells of the tunica intima. This irritation was apparent along the whole extent of the clot. The rest of the lumen of the artery and its large branches was partly filled with fibrinous clots, in which the red disks appeared to be unchanged. The capillary vessels in this part of the nerve presented walls The bundles of nerveslightly thickened. fibres were not sensibly narrowed, and there appeared to be no degeneration within them. Neither was the connective tissue between them very much irritated or infiltrated. pial sheath of the nerve was increased in thickness, and the subvaginal space, which was a little distended, contained a considerable increase of the fibrous bands usually found in it.

"Left eye.—The optic nerve and retina gave unmistakable evidence of an atrophy of the nerve-fibres consecutive to a marked sclerosis of the walls of the blood-vessels and their enveloping connective tissue.

"Microscopic examination of the body of the sphenoid.—Thin sections of this softened mass,

to the naked eye, offered a reticular structure with narrow meshes. Under the microscope the tissue appeared to consist of a stroma of fibrous tissue, limiting meshes usually large but sometimes small. Oval, round, or oblong in outline, these meshes were more or less completely filled with masses of epithelial cells closely packed together without any visible intercellular substance. At the periphery of these cell-clumps the cells were cylindrical, and, by their bases, rested perpendicularly upon the surface of the limiting stroma. Advancing from the periphery towards the centre of these cell-masses, the form of the cell changed from the cylindrical to the round cell, and finally to the discoid or flat squamous cell of the corneous layers of the epithelium of some mucous membranes. Frequently each of these forms of cell was applied upon the other two or more layers deep. Many of the cells, particularly those nearer the centre of the clumps, were undergoing mucous or colloid degeneration.

"The fibrous stroma limiting the cellclumps in different points showed all the stages of transition from comparatively normal white fibrous tissue into embryonal tendinous tissue. The trabeculæ carried all the vessels which were often embryonal, and which showed no tendency to project into the

cell-clumps above mentioned.

"The morbid mass therefore very well represented the structure described by Cornil and Ranvier as a lobulated epithelioma with epidermic evolution.'

(To be continued.)

## REVIEWS AND BOOK NOTICES.

A MANUAL FOR THE PRACTICE OF SURGERY. By THOMAS BRYANT, F.R.C.S. Second American from third English edition. H. C. Lea, Philadelphia, 1879.

The sale of a second edition in less than three years is evidence of the professional estimate of this well-known treatise. The book is somewhat enlarged, much of it rewritten, and, to our thinking, improved. We notice also that eighty-eight new wood-cuts have been added.

THE SCIENCE AND PRACTICE OF SURGERY, INCLUDING SPECIAL CHAPTERS BY DIFFERENT AUTHORS. By FREDERICK JAMES GANT, F.R.C.S., Senior Surgeon to the Royal Free Hospital, author of "The Principles of Surgery: Clinical, Medical, and Operative," Second Edition, two volumes. Philadelphia, Lindsay & Blakiston, 1878.

In order to keep pace with the rapid advances that have been made in surgery in the last few years, both in Europe and in America, the author of this work has carefully revised and enlarged a second edition, which is now

offered to the profession in two medium-sized volumes. To bring the science and practice of surgery up to its present advanced state. Mr. Gant, in revising his text-book, has very wisely secured the services of some eminent specialists, who have contributed several very instructive papers on subjects to which they have given particular attention. Mr. Purves, of Guy's Hospital, has written the chapter on the "Ear;" Mr. Charles S. Tomes, one on "Dental Surgery;" Prof. Erasmus Wilson, one on "Diseases of the Skin." Mr. Wm. Adams, Dr. Morell Mackenzie, Dr. Robert Barnes, Mr. Wm. Rose, and Mr. Power, have each received Mr. Gant's grateful acknowledgments for original contributions on subjects on which they are considered high authorities. The article on the subject of inflammation contains a brief but lucid description of the sphygmograph and its use in determining the characters of the pulse in the different phases of the inflam-

matory process.

In regard to antisepticism in surgery Mr. Gant says, "I do not find in practice any unequivocal advantage from the antiseptic method of treatment; and I am disposed still to rely, as I have done for years with quite equal success, upon the security afforded by those general hygienic arrangements in regard to clean air and clean dressings which prevent the necessity of having recourse to any antiseptic measures. In short, I advocate what may be termed presepticism instead of antisepticism in the practice of surgery." This conclusion in regard to the relative merits of antisepticism is clearly in accord with the teaching of a majority of the English surgeons, especially of those who belong to the conservative school. The section devoted to the treatment of diseases of the genitourinary organs is very full, and will be of much service to the practitioner in conse-quence of the many practical suggestions that it includes. Considerable space is like-wise given to the consideration of diseases of the joints and their treatment by excisional surgery. It is well known that Mr. Gant has made special studies of these two subjects, viz., diseases of the genito-urinary organs and of the joints, consequently he has come to be considered one of the highest authorities in all that pertains to the management of these exceedingly troublesome affections. This fact will be sufficient apology for the apparent "undue prominence" that he has given to the discussion of these subjects.

The work has nearly a thousand illustrations,—over twice as many as the previous edition contained. The section on ligation of arteries is furnished with outline drawings that show the relations of the principal arteries in the different surgical regions, and the surface-lines indicating the points at which these vessels may be most easily ligatured.

Due credit has been awarded American surgeons for many valuable contributions to the art of surgery. Indeed, no subject pertaining to surgery has been lightly treated in this work, for every page displays the familiarity with the literature of his department that the author of a text-book should possess in order that he may make it as instructive and as comprehensive as possible. C. T. H.

DIFFERENTIAL DIAGNOSIS, ETC. By F. DE HAVILLAND HALL, M.D. American edition, with extensive additions. Philadelphia, D. G. Brinton, 115 South Seventh Street.

We look generally with suspicion at new books on diagnosis, as we think that Da Costa's great work has fully exhausted the subject, but by some parts of the above-mentioned little volume we have been agreeably surprised. In the chapter on fevers, the main differential points and the pathognomonic symptoms, wherever there are such, have been admirably well grouped together, and we see here for the first time, in a systematic way, special attention paid to the earlier signs of disease. The eruption in the roof of the mouth twenty-four hours before its appearance on the skin in eruptive fevers, and, in another chapter, the prodromic signs of a rheumatic, gouty, scrofulous, or tubercular diathesis, long before decided attacks clearly manifest the disease, are well given. But the poor nervous system! In multiple sclerosis we find the important fact not mentioned, that the disease often disappears apparently for a long time; in apoplexy due to embolism it should have been noted that unconsciousness is very transient or absent; myelitis is used in the old meaning of the word, including softening, and the different kinds of transverse, ascending, and other forms of myelitis, with their differential points, are not thought of. Bulbar paralysis is unknown to the author; spasmodic spinal paralysis, poliomyelitis anterior acuta, saltatory spasms, chorea, and other affections, he considers evidently of too little importance to mention. The chapters on the circulatory, respiratory, digestive, and urinary system merit almost as much praise as does the one on fevers, but we earnestly hope that, in case the book should live to see a second edition, the article on the nervous system will be totally rewritten.

## GLEANINGS FROM EXCHANGES.

CASE OF INFLAMMATORY FUNGOID NEO-PLASM.—Under this title, Dr. L. A. Duhring (Archives of Dermatology, January, 1879) gives a very minute and careful history of an extraordinary and extremely rare form of disease of the skin. The patient, a widow, 58 years of age, and enjoying good general health, had never before suffered with any disease of the skin, excepting an attack of

vesicular eczema in August, 1876. In October of the same year, the affection for which she consulted Dr. Duhring first showed itself in the form of a red spot, the size of a dime, on the right side of the forehead, not inflammatory, but looking like a superficial burn. This gradually increased in size, and by the end of ten months began to rise slowly above the level of the skin, when it assumed a purplish hue, and presented the appearance of a boil. There were no subjective symptoms. Other tumors, of a somewhat similar character, subsequently appeared over various parts of the body, sometimes coming and going, unlike the first, with great suddenness, nine coming upon the scalp in one day. Some of these gave rise to pain and itching. Dr. Duhring first saw the patient in October, 1877, since which time she has been continuously under his observation, the various tumors coming and going, some growing so large as to require operation for their removal. A careful description of the various lesions, their appearance at different periods, etc., is given in the original paper. Treatment has been thus far of no avail.

The microscopic appearance of the tumors, representations of which accompany Dr. Duhring's paper, shows (× 300) the whole corium infiltrated with a new growth, the cells being more abundant in its deeper portions. The walls of the hair-follicles were also packed with neoplasm. The cells were homogeneous in character, not being nucleated, as a rule. Some of them had nuclei, but none more than one nucleus. There were no spindle-cells, so far as could be seen; nor was there any connective tissue or elastic fibre-bundles, as

in normal skin.

Dr. Duhring regards the affection as not only new, but of such a grave character as to make it deserving of the closest study. There were two principal lesions,-the flat patches and the round tumor-like growths. The former were of various sizes, slightly elevated, dry, scaly, chapped-looking, and furrowed, and were followed by dirty-yellow pigmentation. The tumors varied in size from that of a split-pea to that of an egg, some being soft and others firm to the touch. They were either smooth and tense, or else had an excoriated surface, from which oozed serous and bloody fluid, and they were distinctly furrowed or lobulated. The subjective symptoms were principally itching, with occasional pain and a burning sensation. One of the most remarkable features of the disease was the exceedingly rapid development, and sometimes equally rapid disappearance, of the lesions, noted when the tumors underwent involution; pigmentations were usually left, but no permanent scars. Hebra first met with a case of this affection in 1872. He described it as new, and simply called it neoplasma. He met with a second case in 1874, which had been described by Hans Hebra and Geber; and these Dr. Duhring believed

were the only two cases on record.

DUBOISIN.—A new alkaloid has lately been extracted by MM. Holmes and Gerraud (Bull, de Thér., xciv.) from Duboisia myoporoides, an Australian plant, belonging to the order Solanaceæ. This alkaloid is of a yellowish color. It is only soluble in water in the proportion of I to 120, but readily dissolves in alcohol, chloroform, ether, benzol, and bisulphide of carbon. The sulphate and bromide are its only crystallizable salts. The reactions of the sulphate are identical with those of atropia; in fact, the alkaloid is also closely allied in its physiological properties to the latter. It dilates the pupil even more actively than atropia. One milligramme dissolved in water and injected subcutaneously checks night-sweats efficiently, and Marmé has found that "if dogs are so far poisoned with morphia that the heart's action has fallen to two or three beats in five seconds, and the respiration has become irregular, the injection of small doses of duboisin beneath the skin immediately strengthens and accelerates the heart, and quickly renders the breathing regular." Hence duboisin would seem useful as an antidote to morphia. In frogs, the injection of one centigramme in aqueous solution produces tetanic convulsions after a variable period of from two to twenty-four hours. The price of duboisin is at present very high; it is advertised by Schering, of Berlin, at forty marks, or ten dollars, per gramme.-Medical Times and Gazette, February 8, 1879.

THE PHYSIOLOGICAL ACTION OF COFFEE. -Professor Binz has been making some new experiments on this subject. He found that very large doses not only raised the temperature, but caused death by convulsions; but the latter could be averted by artificial respiration. Moderate doses of caffein raised the blood-pressure, the effect being the same whether the pneumogastric nerves are divided or not. Professor Binz has also examined the effect of caffeoon, the name given by Boutron and Frémy to the volatile product developed in the coffee-bean by roasting, and he finds that it acts, like caffein in moderate doses, as a stimulant to the brain, the heart, the respiration, and the heat-producing apparatus. He agrees with Hoppe-Seyler and Voit, that an ordinary infusion of coffee slightly increases rather than diminishes tissue-change. In any case, the influence it exerts in this direction is very trifling. The potassium salts contained in coffee are probably of no physiological importance.—Medical Press and Circular.

CASES OF EMPYEMA CURED BY ASPIRA-TION.—Dr. Joseph Hunt reports (*Med. Times* and Gaz., February 15) two cases as follows:

and Gaz., February 15) two cases as follows: Case I, an infant of fourteen months, when examined showed dyspnæa, cough, nightsweats; no ædema, no rigors, no convulsions; much emaciated; temperature 100.4° (rectum). Weight after aspiration fifteen and

one-quarter pounds. Right side bulged: expansion deficient; vocal fremitus present, but weak; dull throughout, the dulness extending slightly over middle line; breath-sounds weak; no displacement of organs; pulse un-countable and scarcely to be felt. Aspirated, and four and a half ounces of sweet pus removed, and afterwards chest firmly strapped. from mid-sternum in front to spine behind. Three days later, good resonance in front to below nipple, and behind to middle of scapula, absolute dulness beginning at tenth interspace. Breath-sounds strong and healthy; temperature subnormal. Ordered vin. ferri, ol. morrhuæ, āā 3ss ter die, and some gray powder. After this the patient progressed very favorably. When discharged, about a month later, the right side was slightly retracted, absolute dulness beginning in front at sixth rib, behind at tenth rib; but above this there was a considerable amount of modified resonance.

Case 2 was that of a man of 22, who complained of dyspnœa. His illness dated back nearly two years, and for some months previously he had had fluid in his pleura. He was much emaciated, and had a slight cough, with muco-purulent expectoration. There was no history of rigors, night-sweats or hæmoptysis. His evening temperature was 99.5°, being higher in the left axilla than in the right; respiration 28; weight, one hundred and twenty-six pounds. Left side excessively bulged, with obliteration of intercostal spaces; no expansion. Dull throughout, dulness extending at least one inch over the right margin of the sternum; breathsounds inaudible; vocal fremitus and resonance wanting, except at the base behind, where some fremitus could be felt; apex-beat of heart felt just inside and below the right nipple; heart-sounds normal. Aspirated a few days later, one hundred and three ounces of fluid being removed. Severe dyspnæa. After aspiration the heart beat beneath the sternum. Ordered a mixture of quinine, iron, and sulphuric acid. For the next few days the temperature varied between 98° and 99°. Two subsequent aspirations were performed, dyspnœa following in each case to a marked degree. The patient suffered also from slight bronchitis in right lung. At the end of seven weeks the patient was discharged, weighing one hundred and eighteen pounds. Slight bronchitic expectoration; temperature slightly raised at night, but no night-sweats. With the exception that the breath-sounds were weak, the physical signs of the left side of the chest were normal. The chief points of interest were the frequent tappings to allow of slow and steady expansion of the lung, with the dyspnœa and cyanosis notwithstanding, and the difference of temperature in the two axillæ,—first higher in the left, then, when bronchitis supervened in the right lung, higher in the right.

## MISCELLANY

HARD ON THE INVENTORS.—The Medical Press and Circular speaks of a "new tractor for obstetric forceps," recently depicted in the pages of a contemporary, as "clumsy and dangerous enough," and as "perfectly antediluvian," but sinking into insignificance in comparison with the new forceps recently brought under the notice of the profession by Drs. Reed and Whittaker, of Glasgow, "The Patter," says the Press and Circular, "may be described as 'confused inventive genius, in mistaken hostility to maternal and infantile life.' These forceps are not likely to come

into use during, at least, the next century."
OBITUARY.—During the past year, the time-honored British and Foreign Medico-Chirurgical Review died of old age and inanition. In addition, the Medical Examiner and The Doctor among English journals, together with the Deutsche Zeitschrift für Prakt. Med. and the Archiv für Heilkunde in Germany, departed, as an Irish journal says, "this life." These probably perished for lack of proper nourishment. The Medical Examiner apnourishment. pears to have shown symptoms of boulimia, having swallowed one hundred thousand dol-

lars in two years.

"INQUIRENS" writes to the Lancet to know if such a university as the "American University and Medical College of Philadelphia," and said to be situated in Pine Street, exists, and is chartered by law. "And if so," continues "Inquirens," innocently, "what are the regulations for and expenses of obtaining degrees in medicine and dentistry?" "Inquirens" understands that a sham university of similar name did formerly exist, but that the above is, and has been for a number of years, a properly constituted college and school. Ah! no, dear "Inquirens:" it is only Monsieur Tonson come again; and, unless the present Assembly shall interfere with the "curriculum," you can still obtain a diploma under the former well-known conditions.

THE President has nominated the following gentlemen to be members of the National Board of Health: Drs. S. M. Bemis, of New Orleans, La.; Henry J. Bowditch, of Boston, Mass.; Stephen Smith, of New York City; Henry A. Johnson, of Chicago, Ill.; James L. Cabell, of Charlottesville, Va.; T. S. Verdi, of Washington, D.C.; and Robert W. Mitchell, of Memphis, Tenn. As it was deemed essential that one homoeopath should be on the board, we suppose Dr. Verdi is as good as any one else; there is little choice be-tween nonentities. We believe that, on the whole, the composition of the board will be received with great satisfaction by the general profession. Let us wait results

PROF. ALFRED STILLÉ has, at the earnest request of the Board of Trustees, withdrawn his resignation of the chair of Theory and Practice in the University of Pennsylvania.

Dr. Roberts Bartholow has been elected to the chair of Materia Medica and Thera-peutics in the Jefferson Medical College. We believe the selection a very wise one.

EXTEMPORANEOUSLY-PREPARED PLASTERS are rarely, if ever, satisfactory: indeed, we have frequently failed even with machine-spread. We think if our readers will try those of Seabury & Johnston they will be

## NOTES AND QUERIES.

#### DR. HORACE BINNEY HARE.

DR. HORACE BINNEY HARE.

DR. HORACE BINNEY HARE died on Friday, March 21, at the island of St. Thomas, West Indies, of pulmonary consumption, in the 35th year of his age. Dr. Hare, after finishing a collegiate course at Harvard, graduated in the Medical Department of the University of Pennsylvania. He displayed great aptitude for chemical studies, following in this respect his grandfather, Robert Hare, and prepared himself especially as a teacher of chemistry and hygiene. In the winter of 1876 he was elected Professor of Hygiene in the University of Pennsylvania, but was prevented, by failing health, from fulfilling the duties of the chair.

As a teacher, Dr. Hare was comprehensive and clear. His own enthusiasm and exalted personal character always made him not only very popular with his classes, but roused even in his most dormant pupils a large measure of chemical enthusiasm. His original work was characterized by great thoroughness and candor, whilst the unusually complete preparation which he had gained by his studies here and abroad, and his manifest ability, promised for him a brilliant career both as a teacher and investigator. As a friend, Dr. Hare was one of those rarely unselfish and genial characters whose memory lingers through life as an incentive to noble deeds. memory lingers through life as an incentive to noble deeds.

#### OFFICIAL LIST

- OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY FROM MARCH 9 TO MARCH 22, 1879.
- Town, F. L., MAJOR AND SURGEON.—To accompany the first detachment of recruits ordered to the Pacific coast, and, upon completion of this duty, to report in person to the Commanding General, Department of the Columbia, for assignment to duty. S. O. 58, A. G. O., March 11, 1879.
- Tilton, H. R., Major and Surgeon.—To report to Commanding General, Department of the Missouri, for assignment to duty. S. O. 58, c. s., A. G. O.
- DE WITT, C., CAFTAIN AND ASSISTANT-SURGEON.—To proceed to New York City, report in person to the President of the Army Medical Board for examination for promotion, and, upon completion of examination, rejoin his proper station. S. O. 58, c. s., A. G. O.
- LAUDERDALE, J. V., CAPTAIN AND ASSISTANT-SURGEON.— Assigned to duty at Mount Vernon Barracks, Ala. S.O. 40, Department of the South.
- DE LOFFRE, A. A., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—To report in person to the Commanding General, Department of the South, for assignment to duty. S. O. 58, c. s., A. G. O.
- PORTER, J. Y., FIRST-LIEUTENANT AND ASSISTANT-SUR-GRON.—Granted leave of absence for one month from first proximo. S. O. 41, Department of the South, March 7, 1879.
- Powell, J. L., First-Lieutenant and Assistant-Sur-GEON (recently appointed).—To report in person to Com-manding General, Department of Texas, for assignment to duty. S. O. 58, c. s., A. G. O.
- Rosson, R. L., First-Lieutenant and Assistant-Sur-Geon.—Dismissed from the service of the United States, to take effect March 22, 1879. G. C. M. O., No. 13, A. G. O., February 25, 1879.

## PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, APRIL 12, 1879.

## ORIGINAL LECTURES.

# CLINICAL LECTURE ON BURNS.

BY R. J. LEVIS, M.D.,

Surgeon to the Pennsylvania Hospital and to the Jefferson College Hospital.

Delivered at the Pennsylvania Hospital.

O injuries of ordinary occurrence produce such great and prolonged suffering as burns. Unfortunately, they are rapidly increasing in frequency and severity, due to the use of heat in mechanical occupations, to the universal presence of friction-matches, and, most seriously, to the extended application of highly-inflammable and even explosive fluids for the purpose of illumination. Petroleum is answerable for a great number of the most dreadful of these injuries that we admit to the wards, and the ignorant or careless use of it in attempting to kindle fires, or in filling lamps whilst the wick is still burning, causes some of the greatest human misery and frequent death.

Probably our hospital experience would show that no class of injuries, in proportion to the number, is so fatal. The majority of burns are of domestic occurrence, and women and children the most frequent sufferers. Our records give evidence of the great mortality of cases of burns among children, and of the termination of the sufferings of many, dying within a short period after their admission to the wards, without reaction from the primary shock of injury.

You have seen already, during this clinical term, how varied may be the character of injuries from the application of either dry or moist heat, from a mere erythematous redness of the skin produced by a momentary flash of burning gas or escaping steam to the total disorganization and destruction of a part. Burns vary in severity according to their extent of surface as well as to destructive depth. The complete incineration of a part, as a hand or a foot, might be a matter of less gravity than even a merely diffuse erythema affecting a large area of the skin. A man once walked into this hospital who had fallen into a vat or tank, and was immersed in water not hot enough to produce more than a superficial irritation of the derma,

and without in any place blistering, yet he died within a very few hours. I have had cases in which part of a limb has been totally charred, through integuments, muscles, and even bone. One was that of a man who had been held for some time in the ruins of a fallen blast-furnace, whilst portions of his feet and hands were immersed in flowing molten metal until even the bones were charred; yet he recovered.—of course in a maimed condition. In another instance a man's leg was, by a curious accident, so held in a pot of molten iron that he could not extricate it. and the disorganization was total. So it is evident to you how the grades of such injury must vary.

Arbitrary classifications of burns are made by some surgical authorities, based on their depth, but you need not be troubled about memorizing six or eight distinctions if you will merely bear in mind that the pathological significance, the prognosis, and the treatment of the injury will vary with its locality, the extent of surface involved, and the depth of penetration. If the application of heat be only momentary, a mere erythematous redness will follow, the cuticle will soon desquamate, and then complete restoration will ensue. A more prolonged application of heat will produce serous effusion, elevating the cuticle in the familiar blisters or bullæ. A deeper burn disorganizes the entire skin so that effusion cannot take place; and I have spoken of still deeper destruction, even to the complete incineration, of a part.

A scald results from the application of moist heat, which, with water or steam, is not usually above a temperature of 212°, and the action is liable to be but momentary and superficial in effect. But the prolonged impression of moist heat may be as destructive—and in a pathological view the effect is the same—as that of dry heat, and I am inclined to use the word burn in a generic sense, to include the general action of heat, moist or dry, on the body.

Some of the cases of deeply destructive burning of parts I have seen among persons who were insensible at the time of receiving the injury, as in cases of epileptics who have fallen into open fires or against stoves, and the coma of drunkenness has frequently caused the same. One of the most extensive and deep burns I have ever seen in these wards was in the case of a man who was at the time intoxicated by the fumes of a lime-kiln by which he had lain to warm himself until his back was deeply roasted from the nape to the

coccyx.

It is one of the curious traditions of surgery that the effect of exposure of the surface of the body to the rays of the sun, producing erythema of the skin, is in the text-books classed with burns. That effect is rather due to the intensity of solar light than to heat. I have seen the so-called sun-burn produced when the air was cold and the parts exposed necessarily colder than those which remained covered by clothing; and in the case of a boy whose neck and back were extensively vesicated from exposure to the sun whilst bathing, the skin had been continually wet with cold water, and actual burning was impossible.

When a severely burned patient is first brought into the wards, our attention is at once directed to two important and urgent demands of treatment,—the great pain that he is suffering, and the shock of injury. The immediate inhalation of an anæsthetic and a hypodermic injection of morphia are the speedy recourse, and these should be followed, if pain continues, by the internal administration of morphia, decisively, but vet with caution. When the injury is very severe and the prostration extreme, the patient is sure soon to have well-marked rigors, with tremor, and the sensation of heat yields to a distressing chilliness. the severest cases coma comes mercifully, and continues until death relieves the suf-When there is evidence of great ferer. general shock, it must be treated, as in ordinary traumatic injuries, by stimulants, quinine, nutrients, and warmth. If the clinical thermometer, placed beneath the tongue, indicates a temperature below the normal, it may not be enough to wrap the patient in blankets, which merely retard the escape of heat from the body, but warmth must be artificially imparted by contact with cans of hot water placed beneath the coverings.

The removal of the clothes of a badlyburned patient should be effected with the greatest care, cutting them off and removing them in portions, so as to avoid detaching the adherent cuticle. When blisters or bullæ exist, they should be merely punctured with the point of a needle, so as gradually to drain away the serum, always leaving the epidermis as the natural and unirritating protection for the burned surface.

After the first considerations of relieving pain and shock to the system, the local treatment of burned surfaces will require attention, and this must vary with the portion of the body injured, and also with the superficial extent and depth. Patients are always distressed by the desiccating influence of the air on even slightly-burned parts, and protection by dressings with lotions or unguents is essential. in these wards, in the habit of applying, at first, mildly-astringent and antiseptic unguents for this purpose, such as the benzoated ointment of the oxide of zinc, or the carbolized ointment of the oxide, in the proportion of one part of carbolic acid to sixteen or twenty of the ointment. Such applications are soothing and disinfectant: and, if the surface is extensively blistered, with the epidermis broken, the comfort of the patient will be much increased by encasing the part in a layer of carded cotton, frequent disturbance of the dressing being carefully avoided.

In cases of extensive burn of the surface of the trunk and extremities, involving a very large area of skin, and where changes of the dressing would cause much suffering, I have directed that almost the entire body be simply wrapped in a linen sheet saturated with a slightly carbolized oil. For this purpose linseed oil, from its viscid

character, is probably the best.

Most of the domestic remedies which are resorted to have some merit in at least protecting the parts from the air, but such popular applications as flour, molasses, starch, soap, and glue have the inconvenience of being dirty, and some of them incline to form crusty masses over the surface which are not easily removable. The familiar combination of linseed oil and lime-water—a soapy emulsion—has no real merit, and has the disadvantage of becoming disgustingly offensive when combined with the discharges from burned surfaces. It is at all times exceedingly difficult to prevent fetid effluvia from the bodies of patients who are extensively burned; and such are the most offensive surgical cases we ever have in the wards. As ablutions and frequent changes of dressings are attended with suffering, the prevention of putridity is best effected by the use of carbolic acid, which has the property of being a local anæsthetic as well as

an antiseptic.

The application of a paint of carbonate of lead and linseed oil, as practised by Professor Gross, is said to be very soothing, quickly relieving pain, and it has the merit of being readily attainable in places where severe burns are apt to occur. originator of this treatment says that he has never seen evidence of its being followed by the specific toxical effects of lead, even where the dressing is extensively applied; but in individuals who are peculiarly susceptible to saturnine influence it might be dangerous. A recently-proposed remedy, which has remarkable virtues claimed for it, is the bicarbonate of sodium, in fine powder, dusted over the burned surface or applied as a saturated aqueous solution. It is said to relieve pain instantly, and that burns heal readily under the application. The watery solution of bicarbonate of sodium would have the serious objection of other wet dressings,—in chilling the patient, when largely used.—and it must be remembered that during the existence of shock from burns the temperature is often much below the normal, and that the restoration and maintenance of warmth should be a primary object. Dr. Ludlow, of this city, states that the application of the ordinary brown resin soap, spread on linen cloths, quickly relieves pain, and is a very satisfactory dressing.

When mortification of a part occurs from a deeply-penetrating burn it must be treated, as gangrene from other traumatic causes, with cataplasms and antiseptics, to facilitate separation of the dead from the living tissues, and to avoid fetor and septic infection of the patient's system.

There are some remarkable visceral complications of burns which you should watchfully and carefully anticipate, and, if possible, guard against. The statistics of death from burns show that associated intra-thoracic, intra-abdominal, and cerebral lesions are the causes of death in nearly one-half of the fatal cases. These affections are usually either congestion or inflammation, and are ordinarily associated with burns of the overlying integument. Generally tonic and stimulating treatment seems to be the most available in such complications.

There are other serious pathological as-

sociations of burns, to which I can at this moment make but passing reference. Intestinal ulceration is a frequent and curious attendant of extensive burns, particularly of the trunk, and causes many fatal terminations. This remarkable associated lesion, which affects the mucous membrane of the small intestines, particularly the duodenum, is not well explained, and cannot always be diagnosticated, but the persistence of uncontrollable diarrhæa and vomiting should incline you to direct your attention to the probability of the existence of such lesion.

There are some structural changes resulting from burns involving destruction of integument, which result in cicatricial contraction, and often require the aid of reparative or plastic surgery for their relief. The contact of denuded surfaces is liable to result in their unnatural union: so they should, by position and by dressings, be kept apart, and in parts liable to be deformed by contraction the healing integument should be kept stretched until long after cicatrization is completed.

## ORIGINAL COMMUNICATIONS.

#### EPIDEMIC VASO-MOTOR FEVER.

BY HUGO ENGEL, A.M., M.D., Lecturer on Electro-Therapeutics at Jefferson Medical College, Physician to St. Mary's Hospital, etc.

FOUR years ago I saw a remarkable case of sickness, and again a similar one two years ago, when catarrhal fever was somewhat epidemic in Philadelphia, and now this year, with its undoubted epidemy of grippe, I have observed two more such cases, and members of the profession have told me of several in their practice. All these cases were of such a similar character from beginning to end that I have come to the conclusion that we have to do here with a disease not described as yet, or with a complication or rare form of an already well-known disease, but of which this special variety has not been mentioned yet by any of our modern writers. Nowhere could I find a description of it or all its symptoms combined, and I consider it therefore my duty to give a history of one of the cases, which may be accepted as the type of the affection.

Case.—J. K., 49 years old, after having observed for three days a falling off of the ap-

petite, awoke, on the morning of February 2, 1879, with moderate fever, severe pain and soreness in the throat, pain on swallowing, nausea, and chilly sensations. Being a careful man, he sent for his physician, and I arrived there the same morning. His state was then the following. Sanguine constitution, florid complexion, robust, and with much adipose tissue. Temperature 101°; pulse 108, full and hard; patient is weak and depressed; skin moist, slightly yellow on forehead, around the eyes, and on back of hands; conjunctiva slightly yellow; a papular, itching, and, on scratching, easily bleeding eruption, confined to calf of legs, ankles, and back,-much more on right than left side; tongue moist, thickly coated at the back with a vellowish fur, large and flabby; much nausea; slight tenderness across the stomach; area of hepatic dulness not increased; bowels had a normal motion the same morning; urine somewhat high-colored; specific gravity 1029; increase of uric acid; no albumen; no bile-pigment; spleen not enlarged; severe pain on right side of neck; tonsils both greatly swollen, but the right one more, which has a purplish hue; mucous membrane of pharynx swollen. Patient complains of the above-mentioned symptoms, to which a dry cough is added. Schneiderian mucous membrane not affected, but frequent epistaxis; percussion over lungs clear; auscultation: harsh breathing and large, dry râles. Towards night he complained of great dyspnœa. He had pain in all his limbs, and perspired freely.

I prescribed the patient an emetic,-my usual procedure for acute tonsillitis in robust persons, if accompanied by much nausea,followed this by quinine in small doses, and within three days the patient was free of his tonsillitis, his bronchitis, his gastric, respiratory, and liver symptoms, and the temperature had fallen to 99°. Two days later, though severe sweats set in, the temperature went up again, and became stationary at 10110, declining in the mornings ½°; the same pains, especially on right side of neck, returned, and there appeared, at first, swelling of right calf, then of left calf, then of dorsum of left hand; then the whole integument of the right side of the face swelled so that the eyeball could not be seen; then again the dorsum of right hand swelled. These swellings alternated as described, each lasting about eighteen hours. Skin over swelling had, at least in the face, a very slight blush over it; did not pit on pressure; the swollen parts were painful, not from tension, but on motion or touch, and the temperature over swollen parts was, as the surface-thermometer showed, ½° higher. I examined the urine twice daily; it never showed the slightest trace of albumen; quantity a little over two pints, which, considering the sweats, must be taken for normal. The temperature never fell during or after a sweat, and there was no regularity whatsoever in the recurrence of the latter. There were no brain symptoms, only restlessness at night; the pupil of right side was somewhat dilated, and the right auriculo-maxillary fossa was very tender to the touch, and the integument above it swollen; the bowels continued normal; heart normal.

These symptoms dragged on for two weeks, when they gradually made their disappearance, and after an illness, therefore, of about three weeks' duration, the patient was convalescent, with no residue except some weakness in the muscles.

Remarks.—The other cases were about the same. In one case the tonsillitis was only very moderate and strictly one-sided; in one the ædema was confined to the right face and neck, and the disease was only of ten days' duration. Besides attending to the tonsillitis and bronchitis, I put the patients on a fever diet,—milk, beef-tea, broths, etc.,—applied leeches to the neck in some cases, gave them a diaphoretic fever-mixture, followed by quinine, and treated special symptoms as they

Now, as regards diagnosis, the disease was not pure tonsillitis. The debility, the continuance of the symptoms after the disappearance of the tonsillitis, and the rapidity with which the latter left the scene, are against the supposition. Diphtheria would have somewhere shown the false membranes; bronchitis alone would have continued longer and, after its cure, left no symptoms. In simple biliousness the liver is a little enlarged, there is bile vomited; while here the urine contained no biliary coloring-matter, the gastric symptoms left rapidly, but the pain and swellings re-It could not have been tonsillitis mained. and bronchitis, followed by acute muscular rheumatism, as the debility in the strong man was too great from the beginning, and as in muscular rheumatism the affected parts never change color, and do not swell, -surely not the face. Erysipelas migrans can be left out of the question, as the swellings disappeared too rapidly, had not at all the appearance of erysipelas, and as we find in the latter albumen in the urine and no pains. The examination of the urine excluded diffuse kidney affection; in sudor anglicus there are no swellings, and in so-called inflammatory dropsy we have, after an exposure to cold and damp, suddenly a general anasarca, with fever developed. The spleen showed no enlargement, and I convinced myself that decided doses

of quinine had no influence on the course of the disease; we can exclude, therefore, Local affections of the vaso-stem show a history. There may motor system show a history. be fever, but it is of short duration: the trophic disturbances are marked, and the locality is not changed. According to my idea, there are only two questions left open,-is it a new disease, or an undescribed variety of influenza? The first case I saw happened when, to my knowledge, not a single case of catarrhal fever existed in the town. We have, besides. never such sweats, neither such a rapid disappearance of the catarrhal symptoms, and, according to all authors, no swellings in catarrhal fever. The vaso-motor system is surely responsible for some of the symptoms. The tenderness at the right superior cervical ganglion; the dilated pupil; the swelling of the integument at different places, with all the symptoms of an augmented blood-supply to these parts for the time being, but with no symptoms of inflammation and rapidly disappearing to reappear somewhere else; the sweats, etc., —all these point to a vaso-motor trouble. Should the specific poison of catarrhal fever affect, in these cases specially, parts of the vaso-motor nervous system? Or is it a new disease, which seems to happen more in the spring of the year, and more in men than in women? I shall leave these questions undecided, and wait for further observations. Perhaps other physicians will report similar cases, and give their views on the subject. We must admit, though, that it looks like a continued fever, due to a specific cause. To recapitulate: without a history of exposure and cold, the affected individual loses his appetite, awakes then with fever, chilly sensations, great pain in the limbs and in back; sweats a great deal; is debilitated from beginning, and has tonsillitis and bronchitis, with epistaxis and great pain on one side of the neck,—or, at least, more there than on the other side, and gastric disturbances. The tonsillitis and bronchitis, as well as the gastric symptoms, disappear after a few days, but the fever continues, and local swellings, alternating at different parts of the body, always, at some time or other, in the face, and sometimes only there, make their appearance. There is pain, confined to these regions, and felt specially over groups of muscles; the sweats increase without influence on temperature; there is nowhere

any organic lesion to be detected, and the disease, after a duration of ten or more days, gradually leaves the patient, who for some time after feels rather weak. Such is the course. I now ask the profession, have there been many such cases in the city, and have they been seen at other times than when catarrhal fever was epidemic?

310 NORTH FIFTH STREET.

#### A CASE OF CAMPHOR-POISONING, FOLLOWED BY SYMPTOMS OF ACUTE GASTRITIS—RECOVERY.

BY JULIO J. LAMADRID, M.D.,

Brooklyn, N. Y.

ON the night of December 1, 1878, I was called to see Mrs. Sarah J., aged 27, and given the following history of her case. For a number of years, but more especially within the last four weeks, she had been in the habit of eating "gum camphor," because, as she said, "I really love it." How much she took each time is uncertain, but she thinks she used to eat, each day, in small portions, what would amount to about the size of an English black walnut. On the day preceding my visit she had fainted dead away; after which she complained of great weakness and a sense of lassitude; also dizziness, and pain in the stomach and bowels. On the following day, about 9 A.M., she became insensible again, and remained in that state for about five minutes. During that time, it was noticed that her arms were contracted or in a spasmodic state, and the head was drawn back. She was restored again to consciousness by restoratives, etc. Soon after this fit, she was taken with a severe chill or coldness all over the body, accompanied by a cold perspiration, which, in spite of external warm applications, as well as warm drinks internally, lasted for over an hour. The pain in the stomach and bowels had also increased; she felt sick at the stomach, but at no time did she vomit any. She also complained of a severe pain in the head and back of the neck. Soon after reaction took place, followed by fever, during which the patient had a frequent desire for water or some cooling drinks. At the time of my first visit I found her suffering from the following symptoms: severe pain in the epigastric region, spreading over the abdomen; nausea and a burning or heating sensation, as of hot steam, from the stomach to the mouth; mouth and tongue very dry and red; the bowels, the day before, had been very loose (about a dozen times), but no action from them to-day; she complained, however, of having the intestines distended with flatus; there was also dysuria. She also complained of giddiness and mental confusion; severe pain in the back of the head, extending down the spine as far as the third dorsal vertebra; the skin was dry and hot; the countenance flushed; the pulse full and frequent (102); temperature under the tongue

Treatment.—Prescribed powders bismuthi subnitratis, gr. x, et morphiæ sulphatis, gr. 1 together, to be repeated every two hours till pain is relieved; after that, every three or four hours. Also cool emollient drinks and pieces of ice, taken frequently, and externally, over the stomach, applications of hot linseed-meal

poultices.

December 2.—Patient better, but very weak: pulse 90 and weak; temperature 101½° F. There is some pain yet in the stomach, and great tenderness; also nausea when she moves or tries to sit up. The pain in the back of the head and neck has almost disappeared, but the neck is very stiff and sore, as is, indeed, the whole body. Her countenance is very pale and somewhat yellowish, such as is seen in chlorotic women.

The further treatment of the case was simply that of acute gastritis. The recovery

was satisfactory.

Remarks.—In looking over the literature at my disposal upon this subject, I have failed to see mentioned the symptom which the patient complained of most next to the gastric pain, viz., pain in the back of the head and down on the neck,

followed by stiffness.

Neither Prof. H. C. Wood nor Roberts Bartholow makes any reference to this symptom, and physiological or, rather, toxicological action of camphor, and to which I have called attention. local pain, etc., caused by a hyperæmic or congested condition of the upper part of the spinal cord, or is it due to some other change or action unknown yet to us, and having been produced only by a long-continued use of that drug? or is it merely a coincidence?

258 FRANKLIN AVENUE, January 3, 1879.

#### BOTHRIOCEPHALUS LATUS.

BY JOHN T. WALKER, PH.G., M.D.

N the 15th of February of this year, Miss S., an office patient of mine, requested me to prescribe a tænicide for her brother Otto, residing at No. - Columbia Avenue, both of whom came from Sweden a few months since. She stated that at irregular intervals he passed a few inches of the worm; that he had been treated by two physicians in his native country unsuccessfully, both of whom advised him to discon-

tinue treatment unless he should experience considerable inconvenience. On this account, he reluctantly took the medicine furnished him, which, however, not only acted quickly, but thoroughly. I prescribed the following:

R Oleoresinæ filicis (male fern), f3ii;

Olei terebinthinæ, f3iii: Olei ricini, f3xii;

Olei gaultheriæ, gtt. xii; Pulveris acaciæ et sacchari, āā 3iv;

Aquæ, f\( \f \)v.-M. ft. emuls.

I ordered the emulsion to be taken in divided doses before breakfast and supper, but the patient commenced and finished it by A.M., without regard to time or quantity. 7 A.M., without regard to time of the medicine
Three hours after commencing the medicine he passed about fifty feet of worm, which portion was thrown away; at midnight he passed the remainder, measuring over one hundred feet, weighing six and a half avoirdupois ounces, which portion I presented to Prof. Joseph Leidy, who pronounced the tænia bothriocephalus latus, and the first of that species he had seen in this country, it being very common in Europe.

Since then I have seen the patient, who is

a man of medium stature, light complexion, rather spare, aged 28 years, formerly a farmer. He feels considerably relieved from the

distress which he at times experienced in the epigastric region, also an almost insatiable appetite.

201 COLUMBIA AVENUE, PHILADELPHIA.

## NOTES OF HOSPITAL PRACTICE.

#### UNIVERSITY OF THE CITY OF NEW YORK.

CLINIC OF ALFRED L. LOOMIS, M.D.,

Professor of Pathology and Practice of Medicine.

Reported for the Philadelphia Medical Times.

AORTIC VALVULAR DISEASE OF THE HEART, WITH HYPERTROPHY AND DILATATION.

JOW, gentlemen, I would like some of you to make a diagnosis for me in this case, although we have not very much time left for its consideration. In the first place, you will observe that this man has a countenance which strikes you at once as that of an individual who is suffering from some grave disease. It does not take long to determine that he has some trouble about the heart; and now we desire to find out, if possible, just what it is,

When the patient is stripped, we see that there is an epigastric impulse, and, on resorting to palpation, we discover that this impulse can be felt over a space six inches in width, extending from the median line to some distance beyond the line of the left nipple. But, although the heart's impulse is spread over such an extended area, there is no increase whatever in its force, and no movement of a heaving character can be felt over the præcordial space. There is no purring thrill there, but simply an ill-defined tremor; and we would say, therefore, that the heart's impulse is both diffused and indistinct. Now, what does this suggest? Answer.—"Hypertrophy." Anything else? Answer.—"Dilatation." Yes; it suggests dilatation very evidently, but there is no hypertrophy now present, properly speaking, because, although the heart is increased in size, the force of its impulse is not augmented.

Before going any further, I wish you to understand fully that this dilatation is by far the most important feature of the case. I do not so much care about what special murmurs there may be about the heart, because, from the amount of dilatation which we find here, I readily infer that the man in all probability suffers from great shortness of breath on making the slightest exertion, cedema of the part, and indigestion, and that, if they are not already affected, the liver and the kidneys will soon become diseased, in consequence of the heart-trouble. The fact of the existence of a cardiac murmur is never of any very great importance, so far as the condition of the patient is concerned, since it does not at all affect it.

In the present instance there are two murmurs about the heart, but neither of them of itself would render the (immediate) prognosis unfavorable. Practitioners are often needlessly worried because they happen to find murmurs in their patients. The question of immediate prognosis, however, depends not on the existence of such, but rather on the point, how much failure of heart-power is present. For instance, I have at present under my care a patient suffering from pneumonia, who has an aortic regurgitant murmur, but I have no doubt that he will make a good recovery, because in his case there is ample compensation for the difficulty about the aortic orifice. Instead of the indistinctness about the heart's action that is observable here, the apex-beat is perfectly well marked and sufficiently strong to indicate that there is no danger. The fact of there being an epigastric impulse in this case shows that there has apparently taken place some change in the right side of the heart, and,

taken in connection with the other signs here present, it affords pretty conclusive evidence that this must be dilatation. Whenever, in a cardiac case, I find that tricuspid disorder has supervened (due either to stenosis of the orifice, insufficiency of the valves, or muscular failure), I always look out for trouble ahead, because the right side of the heart is then no longer able to make compensation for the difficulty that has previously existed on the left side.

On practising auscultation with the stethoscope here, we find that there are two distinct murmurs about the heart. The first is synchronous with the first sound, and is heard with greatest intensity at the base of the heart. We conclude, therefore, that it is an aortic obstructive murmur (or direct murmur, as it is sometimes called), which is produced as the blood is pouring out of the heart. The second murmur is heard best at the apex. and takes the place of the second sound of the heart, while the blood is rushing from the auricle into the ventricle, which denotes that there is a ortic regurgitation. When we investigate what effect stenosis of the aortic orifice has, we find that it produces hypertrophy of the left ventricle. because the latter has more than its ordinary share of work to do. But after a time we reach a point where the heart is no longer able to force all the blood through the contracted orifice, and then dilatation results. Dilatation always occurs during diastole, because more blood keeps flowing in than can be forced out. Now, when aortic regurgitation also supervenes, as in the present case, we have a still greater accumulation in the ventricle, from the blood coming back into it, and, as we would naturally expect, the dilatation is proportionately increased.

In such a case as this, therefore, we conclude that the prognosis is very bad, for the heart-power is now necessarily all the time diminishing.

#### PULMONARY TUBERCULOSIS, WITH CAVITY.

In this woman we find a physical sign of interest, which is so extremely well marked that I think I will be able to make it evident to the entire class. On making forcible percussion over a certain portion of the right lung, we get the well-known "cracked-pot" resonance in great perfection. The peculiar sound which gives it its name, and which is best described as

a "chink," you will notice, is heard at the latter part of the percussion-note. is produced, as you know, by forcing air suddenly out of a cavity, and it can be very perfectly imitated, as you are no doubt aware, by clasping the hands together and striking them forcibly against the thigh. In the latter case the sound is produced in precisely the same manner, the air being thus suddenly driven from between the two hands. For the production of the cracked-pot sound in the chest, it is necessary that there should be a cavity of large size in the lung, that its walls should be quite firm, and that the percussor should strike the chest with sufficient force to drive the air out of the cavity.

This physical sign, I hold, is never heard except in connection with a very large pulmonary cavity, notwithstanding what many of the books tell you about it. A chinking sound is mentioned as being sometimes heard when percussion is made in the case of extensive consolidation of the lung in children, but this is a very different affair from the peculiar resonance which you have heard in such great perfection in the patient now before you. In pneumothorax the sound may occasionally be produced, if the cavity is not of too great size.

Let us now inquire a little more particularly into the history of this case. On questioning her, I find that the patient has been complaining for about nine months. Before that time she was in good health, but she then began to be troubled with a cough, to grow feeble, and to lose flesh. She continued to grow worse until last July and August, when she states that she was in a very low condition, but she then began to pick up again, and since then seems to have been steadily improving. She has been gradually increasing in both strength and flesh, and now, as you see, is looking pretty well.

This is often the case in phthisis. After the formation of a cavity the patient begins to improve, and then not infrequently lives quite comfortably for a long time, although the condition present precludes the possibility of final recovery. Whenever, therefore, you find that a patient is gaining flesh, and otherwise improving, after a cavity has been formed, you may take courage, for it will be in your power to do a great deal for such a patient, and his life may in all probability be preserved for many years to come.

TRANSLATIONS.

SUBCUTANEOUS INJECTIONS OF ATROPIA IN HYSTERICAL VOMITING. — Czernicki (Cbl. f. Chir., No. 5, 1879; from Gaz. Hebdom.) had occasion to observe the case of a girl of 15, in whom hysteria had shown itself in the most varied manifestations during nine months. Among the most striking symptoms was severe gastralgia, with uncontrollable vomiting. The patient's intellectual faculties appeared quite normal. The attacks of vomiting occurred after meals, about one-third of the food being regurgitated. Finally, the patient could not retain the smallest quantities of milk or water. All the various means employed to check the vomiting counter-irritation, injections of morphia, etc.—finally lost their power entirely, and the patient became rapidly emaciated.

With a view to diminish the evil influence of continued morphia injections by the antagonistic effect of atropia, and also to allay the muscular contraction which gave rise to vomiting, the two remedies were employed simultaneously as follows. Shortly after a meal one centigramme (1/6 gr.) of morphia was injected, and five minutes later half a milligramme (130 gr.) sulphate of atropia. The influence of the morphia was very perceptible. If morphia alone was injected, the gastralgia was allayed, but the vomiting persisted. phate of atropia was injected alone, the food was retained, but gastralgia set in immediately. These injections, although gradually diminished in amount, had to be kept up for three months, when at last the vomiting and then the gastralgia disappeared, and the patient was restored to tolerable health. Czernicki has since then used the same combination successfully in relieving the pain and vomiting in a case of cancer of the stomach.

BIVINE'S METHOD OF TREATING STRYCHNIA-POISONING.—Th. Husemann (Cbl. f. Med. Wissen., 1879, p. 59), having seen Bivine's statement that in a given case of strychnia-poisoning 40 grains of bromide of potassium with 10 to 20 grains of hydrate of chloral acted more favorably than 120 grains of the bromide or 40 grains of chloral separately, determined to examine into the matter himself. He examined, first, the influence exercised by the administration of bromide of potassium upon animals already narcotized by chloral, and found

that no more effect was produced than when chloral was given alone. Repetition of Bivine's experiments failed to show any advantage of the combination of chloral and bromide of potassium, in strychnia, over either drug employed alone. In both cases the convulsions were stayed, and a favorable termination ensued. Very large doses of chloral could not be given, on account of toxic symptoms from this drug. The chief advantage of the bromide of potassium, according to Husemann, is to combine with the strychnia into an insoluble salt

SCLERODERMA AND LOCAL ASPHYXIA OF THE EXTREMITIES.—Grasset and Apolinanario (Cbl. f. Chir., 1879, No. 8; from Gaz. des Hôpitaux) give the case of a young girl who, at 14, suffered frost-bite in both hands. Muscular atrophy of the left arm appeared later; pemphigus-like blebs appeared, from time to time, on the extensor surfaces of both hands, particularly over the joints of the fingers. Sometimes these left red patches behind; occasionally they were followed by cicatricial thickening of the skin. At the time of examination, the patient being 17 years of age, these had ceased to form. There was then cicatricial contraction of the fingers, with hypertrophy and sclerosis of the skin on the hands. The finger-nails were generally atrophic and deformed. There was muscular atrophy of both arms, with diminished sensibility on the left side. Later, malis perforans pedis was observed; the phalanges of the fingers were gradually lost by ulceration and contraction; the red color of the patches above-mentioned changed to brown; they spread over the body and face, everywhere accompanied by thickening of the skin and loss of sensibility. In short, the characteristics of scleroderma were complete. The authors consider the case one of local asphyxia originating from the frost-bite. The formation of blebs was probably connected, from the beginning, with decided nervous disturbance, anæsthesia, and muscular atrophy. Nothing is said of the further course of the disease.

PATHOLOGICAL CHANGES IN THE LUNGS, FOLLOWING PARALYSIS OF THE VAGI.—O. Frey (Berlin. Klin. Wochens., 1879, p. 49; from a monograph) investigated the condition of the lungs after section of both vagi. In some cases, serous effusion into the respiratory passages, hyperæmic thick-

ening, broncho-pneumonic foci, and emphysema followed. Death resulted from suffocation. In other instances, the greater part of the lungs remained healthy, inflammation, with cloudiness and swelling of the epithelium, however, showing itself in a limited portion. We further learn from Frey that simple narrowing of the airpassages gives rise to vesicular emphysema or to atelectasis, but never to inflammation: that section of the recurrent nerve on one side is without result; section of the recurrent of both sides, however, is followed by broncho-pneumonia, in case paralysis of the œsophagus is brought about and bits of food get into the airpassages; and, finally, that paralysis of the cardiac vagi either does not exercise any influence upon the lungs, or has only a very secondary influence. What has been said of the cardiac branches of the vagi may also be stated of the lung-branches: so that in general it may be asserted that inflammation of the lung arises when. through paralysis of the larynx and cesophagus, foreign substances penetrate into the air-passages.

THE TROPHIC RELATIONS OF THE VAGI TO THE CARDIAC MUSCLE.—In the same number of the Wochenschrift a monograph of Eichhorst is analyzed. Eichhorst studied the effect of cutting the vagi of both sides in fowls, rabbits, and dogs. He arrived at the following results. In fowls death results from acute fatty degeneration of the heart and cardiac paralysis of a trophic origin; in rabbits and dogs, when tracheotomy was first performed to prevent pneumonia, death nevertheless resulted from trophic paralysis of the heart. Changes in the muscular tissue of the heart were observed after death in rabbits.

THE AUTOMATIC ACTION OF THE RESPIRATORY CENTRES, AND THEIR RELATIONS TO THE VAGUS AND OTHER RESPIRATORY NERVES.—The Wochenschrift also contains a note on Burkhart's investigations (Arch. f. d. ges. Physiol.). Burkhart finds that animals who have been bled freely can be put into an apnœic condition more easily and longer by artificial respiration than before; that Rosenthal's statements relative to the influence of the vagus and laryngeus superior on respiration may be confirmed, while Rosenbach's theory of inhibitory nerves running through the vagus to the "næud vital" is untenable; and concludes, as a result of his own ex-

periments, that the influence of the respiratory filaments of the vagus is direct, and not through the blood-vessels. Burkhart failed to prove this with regard to the

expiratory nerves.

Bucco-Pharyngeal Tuberculosis. — Laboulbène, in a clinical lecture published in La France Médicale, Nos. 15 and 16 of the current year, gives notes of a case of this unusual form of disease, together with the results of the autopsy, some historical account of the affection, and a brief summary of the symptoms presented. the first period, which passes almost always unperceived, a few grayish granulations can be seen on the bucco-pharyngeal mucous membrane, but there are no other symptoms. Ulceration begins by the fall of the epithelium, which lays bare the granulation; the stage of pain now begins; the impression of cold air, the contact of wine, of food, movements of the tongue, give rise to pain, sometimes so severe that the patient refuses food. Salivation, sometimes excessive, occurs. There is, however, no involvement of the salivary or cervical glands. Later, the patient shows signs of pulmonary, abdominal, or cerebral phthisis. On examining a case of this kind, one is struck by the fact that the edges of the ulcers are elevated and festooned; some of them, however, are sharply rounded, while others resemble the trail of a worm on a piece of cloth. The former ulcers are old, the latter recent,—a characteristic which is wanting in syphilis. Around these older ulcers is a yellowish patch, composed of tuberculous infiltration, which is pathognomo-The ulcers last for a greater or less time, but they are curable. Dr. Laboulbène gives the differential diagnosis between these ulcers and those of the various forms of syphilis, of epithelioma, buccal psori-The treatment recommended includes such caustics as tincture of iodine, nitrate of silver, perchloride of iron, together with emollient washes. attention must be paid to the patient's general condition.

REGENERATION OF THE VITREOUS HU-MOR.—M. Gréhant recently read a note from M. Philipeaux, at the Société de Biologie (Le Mouvement Méd., 1879, p. 125), on the regeneration of the vitreous humor in animals. M. Philipeaux's experiments were made upon twelve young rabbits and each of these animals' eves was nearly completely emptied, and within a month after the operation commencing regeneration of the vitreous humor could already be perceived. After various experiments. M. Philipeaux concludes, 1st, that the vitreous humor, even if almost entirely removed from living animals, may be regenerated just like other organs, providing a part remains; 2d, that the vitreous humor, in becoming itself regenerated, may regenerate the capsule of the crystalline lens, and this the lens itself.

CHOREIC MOVEMENTS OF THE LEFT HAND INDUCED BY A CEREBRAL TUMOR. -A curious observation, which goes to confirm the much-discussed doctrine of the localization of cerebral functions, is reported by Dr. Emile Demange (Le Mouvement Méd., 1879, p. 126). A woman, 64 years of age, of small stature, had presented, since the age of 12, a complete deformity of the vertebral column and of the thorax; the rest of the bony When the frame, however, was normal. movements of the upper limbs were examined, it could be seen that on the right side these were performed regularly; on the left side, however, the movements of the hand and forearm became choreic when the patient attempted to seize any object. At that movement the ring-finger and little finger were seized by a sort of spasm; the fingers spread out like a fan; the hand became flexed on the wrist; it was carried hesitatingly towards the desired object, which could only be seized after several spasmodic efforts. Nothing similar to this could be observed in the left leg or in the side of the face. This choreic movement of the hand had existed for many years,—how many the patient could not say. The tongue was unaf-

The patient having succumbed to some intercurrent disorder, a post-mortem examination showed numerous adhesions between the calvarium and meninges. Along the right edge of the antero-posterior suture a series of deeply excavated depressions existed in the bony wall. The largest of these, situated on the summit of the vertex to the right, was the size of a quarter-dollar; it was hollowed out, as if cut with a punch; the bony lamella which formed its bottom was two to three milthe same number of guinea-pigs. One of limetres in thickness. The other depres-

fected: there was no disturbance of sen-

sions were the size of lentils. About the borders of these depressions the meninges were thin, opaque, adherent, and corresponding to each of the depressions was a tumor situated on the cerebral convolutions, pushing out and filling up the hollow in the bone. The chief tumor was the size of a large hazel-nut, and occupied the posterior fourth of the anterior right frontal convolution and the upper third of the right ascending frontal convolution. This is the exact point, according to Ferrier, where a cortical psycho-motor centre exists which governs the movements of the hand and arm, and which may be called the centre of prehension. The permanent excitation of this centre by the choreic meningitis, and the confinement of the tumor by the bony covering of the brain, explain the choreic movements observed.

ARREST OF TUBERCULAR MENINGITIS.-M. Dujardin-Beaumetz reports (Le Progrès Méd., 1879, p. 208) the case of a man of 23 who had suffered with decided symptoms of intermittent meningitis. Sulphate of quinine was entirely without influence. For five days he had persistent cephalalgia, which appeared about to usher in an attack of typhoid fever, coma followed, and from the sixth to the tenth day the symptoms of tubercular meningitis, notwithstanding which the man recovered. The patient's antecedents were very unfavorable to this result, his father and mother having both died with phthisis. Examination of the eye-ground had shown exudation with tuberculous granulations. The treatment consisted in blisters, calomel, and ice to the head. M. Beaumetz's paper was read before the Société Médicale des Hôpitaux, and several other cases were brought forward by members showing a similar arrest of the disease in question.

Purgative Action of Oleum Ricini.—At a recent meeting of the Société de Thérapeutique (Bull. Gén. de Thérap., 1879, p. 139), M. Constantine Paul stated that he had recently made a number of experiments to ascertain the quantity of ol. ricini necessary to obtain purgative effects; the dose varies from 4 to 30 grammes (3i ad 3i); on the other hand, a few seeds of the plant are sufficient to occasion symptoms of cholera. It seems likely, therefore, that the seeds contain some purgative principle which is not present in the oil. M. Vigier, in reply

to M. Paul, stated that the active principle is in the tegument of the seed. 50 centigrammes (71/2 grains) being sufficient to purge violently. M. Labee remarked that since the introduction of Hunvadi-Janos mineral water, castor oil had not been used to the same extent. Nevertheless, in certain cases, as embarras gastrique, for example, salines fail to produce a good effect, and the oil is preferable. M. Limousin spoke of the administration of the These are about the size oil in capsules. of a pigeon's egg, and are made of equal parts of gelatin and glycerin, so that they are quite flexible and can readily be swallowed.

FATTY EMBOLISM.—Prof. Richet reports the following case (Le Mouvement Méd., 1879, p. 77). A roofer had fallen from a height, fracturing both femurs, the right seriously wounded, and with the entry of air into the tissues. On examination, the blood flowing from the wound appeared covered with drops of oil, showing rupture of the medullary canal of the femur with communication with the wound. Various other fractures had occurred. The extremities were cold, as was also the entire left arm, although no injury had occurred in this limb. There was a total absence of pulse. Although shock would suffice to account for the coldness. vet there was reason to believe in the existence of fatty embolism. Microscopic examination of the blood, previously treated with osmic acid, which, as is known, colors fatty matter but does not color any of the normal constituents of the blood, showed the presence of oil-globules. These were very numerous in the femoral vein, much less so in the pulmonary vein. The man succumbed to asphyxia. Prof. Richet believes fatty embolism to be closely connected with other forms of absorption of more or less septic fluids by the veins. He also refers to the thesis of Théodore Flournoy, of Strasbourg, published last year, in which ten cases of fatty embolism are reported.

RUSH MEDICAL COLLEGE. — Dr. James Nevins Hyde has been made Professor of Dermatology and Venereal Diseases in Rush College, and Dr. John E. Owens has received the appointment of Professor of Orthopædic Surgery in the same institution. Both chairs are now for the first time established in the regular course of this college.

# PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, APRIL 12, 1879.

## EDITORIAL.

CONTAGIOUS DISEASE IN EVERY-DAY LIFE.

A MONG the duties of the medical profession to the general public, none is more important than that of warning against the approach of diseases whose very existence, perhaps, may be unknown to those whose life and health are threatened. Aside from destructive and mortal epidemic disease, there are various affections of a serious though not necessarily fatal character, against the occurrence and spread of which precaution should be taken. Among these is syphilis, a disease which is on the increase in this country, and which, owing to the insidious and apparently innocent nature of some of its lesions, may be spread about among the ignorant or unsuspicious without a thought of its character and consequences. It is not putting the matter too strongly to assert that a considerable proportion of the cases of syphilis occurring in this community originate from secondary lesions of the mouth and lips. Epidemics of syphilis have been reported in foreign journals as originating in a blowpipe used in common by the workmen of a glass-factory; and the disease has been conveyed by instruments, as the Eustachian catheter used by physicians, or in dentistry. Last year Drs. Maury and Dulles, of this city, reported a series of twenty-two cases of syphilis inoculated through the practice of tattooing. All these cases show how easily the virus can be conveyed from the mouth of the infected person to various localities upon the victim, and should teach us not only to be constantly on the lookout for such sources of infection.

but especially to warn our patients—of course, without going into detail—against the dangers of contagion in the multifarious contacts of daily life. Any one who goes down Chestnut Street may see the venders of children's toys, such as whistles, expansible balloons, etc., demonstrating the mechanism of their wares by putting them into not very cleanly mouths, and then handing them over to the buyer. Gallipe, in the current number of the Annales d'Hygiène, says that he knew of one such vender who was suffering with mucous patches while plying his vocation. A working-man, a car-conductor, or what not, suffering from mucous patches, is not going to give up his livelihood for fear of giving rise to and spreading contagion. Women and children, as well as men, are exposed in a thousand ways to the dangers of disease in their daily coming and going. The only way to avoid danger from this source is to inculcate cleanliness and Urge the not too fastidious patient never to put coins in the mouth, nor to handle public railings, seats, etc., with ungloved hand; or, if this cannot be prevented, at least never to put the hands near the mouth without having just previously washed them. Nurses should under no circumstances let strangers or even non-relations kiss the children under their The freedom with which our children are occasionally offered to the endearments of Bridget's casual acquaintances, male and female, is alone revolting; but when the extreme danger of such contact is considered, it may well be thought not out of the physician's province to give timely warning.

FIFTY years ago there were eight medical journals in the United States. Now there are fifty-three of the regular school, nine homœopathic, and seven eclectic. In the last fifty years, sixteen hundred and thirty regular journals and two hundred and fourteen homœopathic have been started, leaving about six per cent. of the former and four per cent. of the latter class as survivors.

## CORRESPONDENCE.

#### LONDON LETTER.

LENTEN FAST" is used as an ex-A pression conveying the idea of a very strict regimen. Of all the fasts of the early Christian Church, that of Lent was by far the most rigorous. It is not, however, as a Church ordinance that a Lenten fast is now being considered, but as a hygienic arrangement. A review of its history as a Church ordinance, however, will enable us all the better to understand it in its other relationships. The fast of Lent-the Saxon for spring-was at first a voluntary affair, not incumbent upon all. Fasting is a common Eastern custom, in vogue among Jews and Mohammedans as well as among Christians. At first the fast was observed for but forty hours, but it increased gradually to thirty-six days, where it remained till Gregory the Great made it forty days, in direct imitation of Christ's forty days' fast in the wilderness. At first the fast was but abstinence from flesh and wine, up to the fourth century; but they waxed more rigorous under the Innocents. The Greeks abstained from fish, as well as meat and wine, during the spring fast. The usual dietary consisted of herbs, roots, dried fruits, and nuts. In the mild climate of the littoral of the Mediterranean probably little real suffering was entailed by such a fast, even when prolonged to forty days; but when Christianity spread inward over the continent of Europe, the fast of Lent became a very serious affair, especially for invalids. So long as milk and eggs were allowed, the fast did not press unduly upon the delicate and the sick; but when these became forbidden, much suffering must have been entailed. The austere regimen which was voluntarily submitted to by an early Christian at Antioch, without much self-denial being required, became a very grave matter for an invalid at Treves, when "the fatal gift of Constantine" had made Christianity the religion of the empire and the Church ordinances had become the rule for all. The Church, ever watchful of its temporal interests, increased the severity of its fasts, in order to increase the sale of dispensations and indulgences. Thus, the handsome bridge at Dresden was built with money raised by the sale of permissions to eat eggs and milk in Lent.

In order to comprehend how the spring fast became a salutary arrangement, we must review the condition of the people in the Middle Ages. There were no tinned vegetables then; Raleigh had not found out potatoes; and the vegetable food available for winter was scanty in amount and little varied in character. A small quantity of apples and onions, and a few coarse winter-greens in some sheltered nook, rarely found elsewhere than in the

monastery garden, were the only vegetable food available; and the German sauerkraut and the Slavonic pickled gherkins were very necessary articles of diet. Corn and pulses, of course, could be stored in any quantity, but then they do not contain the principles be they what they may—which ward off scurvy. The ordinary dietary of the people was salted meat boiled with balls of ground corn, flour, or oatmeal. On the approach of winter, the fattest cattle were slaughtered and salted, while the others were turned out on to the great open plains, to find their own food. or to starve, as the case might be, and according to the severity of the weather. Only among the affluent were cows kept during the winter; and fowls do not lay many eggs during the frosts of December and January. The only fresh meat procurable during the winter months was that of the pig; and a curious custom is connected therewith. Alike amidst our Northern hills and on the slopes of the Carpathian Mountains obtains the practice of giving away a very considerable portion of each pig killed. Whenever the pig was slaughtered, a certain portion of the fresh meat was given to a limited number of neighbors, who in their turn sent round so much of their pig when it was killed. This circle is still described, in the North of England, as the "neighbor row," and even during lapses of friendship the customary reciprocal gifts are sent and accepted. By such an arrangement a certain, if limited, supply of fresh meat was furnished during the long winter months, when "Jack Frost" laid his hand heavily and persistently on undrained lands and forests.

Such were the conditions of life where the pig was an article of food. In Scotland, where there exists an Israelitish prejudice against the unclean beast, other devices and practices were entailed. When the long use of salted provisions was telling upon the mediæval Scots, they used to turn out and hunt their cattle, driving them into the enclosures once more, and then they used to bleed them. Having done this, they again turned out the unfortunate cattle, with their thinned blood, to face the wintry blasts. However hard this may seem on the cattle, the blood so procured was a boon to the people. The blood as it flowed was well whipped to deprive it of its fibrin, and then was mixed with fat, seasoning, oatmeal, or groats; after which it was put in the oven and baked, coming out as a savory blood-pudding. By means of this blood-pudding a substitute for fresh meat was furnished, the blood-salts of the vegetable-fed ox being so transferred to man. A similar pudding was made from the blood of each pig killed, and also every goose. In the North, the giblet-pie always contains the skin of the goose's neck stuffed with blood and seasoning. goose and the pig are both animals easily fed in winter, while the ox entailed a store of hay, and the sheep was decidedly troublesome.

With such a dietary, eked out with apples, the people passed the winter. During early centuries, before the introduction of the potato, the apple was sedulously cultivated, and each homestead had its orchard, well stocked with various kinds of apples, especially those that kept well through winter,—hard, thick-skinned, sour apples, that would keep till Faster.

The consequence of such a dietary was that the people suffered severely from skin diseases of scorbutic character,-land-scurvy, in fact. Such skin disease is quite common among the Cumbrian hills, where in many farm-houses, up to a period I can well remember, salted meat was regularly eaten through the winter. The severity of the weather and the state of the roads interfere with the periodic visits of the peripatetic butcher, and the farmsteading had to be provisioned accordingly. Salt meat, boiled bacon, and pease pudding; cheese and oat-cake; bread made from "mashelton," —that is, wheat, barley, and rye, all grown together and ground together,—such was the staple of the food during winter. Skin disease became prevalent during the months of early spring, and the fast of Lent doubtless saved much disease. Few fish are fit to eat in winter, while the ice which bound the rivers in winter disappears in spring, and thus the river furnished some food; but probably the

poor saw little of the river-supply of food. Early vegetables, therefore, were eagerly sought for, and are still sought for, by persons who concern themselves little with Lent as a Church ordinance. In the North, where winters are long, it is customary to seek for a species of wild spinach, called "Easter ledges," and with it, the young shoots of the nettle, and any other innocuous vegetable leaves, they make a pudding. The broadleaved, dark, wild spinach grows in orchards and sheltered meadows, in small patches, and might still be cultivated with advantage. These vegetables are carefully picked and washed, and then thoroughly chopped up; some barley is then added, and the whole is put into a bag and boiled with the meat in the pot. This brownish-green mass, called a "herb-pudding," is far from an unpalatable dish, and is even better warmed up the second day. Such a vegetable dietary was of the greatest service in freeing persons afflicted with scorbutic affections from their maladies. It is still regularly eaten by old-fashioned people, who attribute to it potent anti-scor-butic qualities, and who hold the antiquated pathology that "the blood changes in spring and autumn." Such persons used to be regularly bled at these times of the year, and in the days of bleeding, when the apprentices got all the fees (a shilling) for bleeding for themselves, it is needless to say the profession fostered the convenient pathology. It was quite customary to call at the doctor's, on Sunday morning, to be bled before going

to church. Whether the bleeding was salutary or not, there is no doubt that the herbpudding was. Milk and eggs begin to be plentiful during Lent, and by their use, with the vegetable food just described, our mediaval ancestors managed to cure their cutaneous maladies.

The condition of the mass of the population at the end of the winter must have closely resembled that of Anson's crews when afflicted with scurvy. Indeed, the nomenclature of skin diseases then was very simple; all were scurvy, to which the adjective "dry" or "wet" was prefixed, according to circumstances. Consequently, we see that the fast of Lent, by doing away with the use of salted meat, was of great value from a prophylactic point of view. The salt fish and egg-sauce, now fashionable in Lent, is merely a matter of religious feeling, for, except in certain localities, salt fish must have been rarely met with. From a hygienic point of view, salt fish is about as objectionable as salt meat. Of course the introduction of the potato revolutionized the winter dietary, and, where it was freely used, scorbutic affections were comparatively rare. Recently the turnip and the carrot have been added to the winter dietary, and the fast of Lent is becoming a religious ceremony almost entirely. But it had its value up to a very recent period; and the regulations of the Church as to the great fast of Lent were in so far salutary that they prevented a great deal of disease otherwise scarcely avoidable, and probably in other cases cured persons of their scorbutic affections, the outcomes

of their winter dietary.

In a recent letter I reviewed the subject of the premurmuric stage of valvulitis, and since then a very instructive heart has fallen into my hands. One evening a groom left at my house a most enormous heart, merely saying that it was a horse's heart, from a well-known veterinarian. No means of weighing the bulky thing existed, but it filled a very large pot, and was as large as a big human head. history of the animal could be procured, unfortunately, but heart disease had been diagnosed in life, and when the animal died, and this enormous heart was found, it was sent on to me. The ventricles were full of blood; the right side of the heart was little enlarged, and the pulmonary and tricuspid valves were healthy. The massive left ventricle was in diastole, and filled with blood-clots. The mitral valves were apparently free from disease, but the aortic valve-cusps were evidently diseased. The semilunar valves of the heart of the horse are transparent and thin, and consist merely of the two folds of endocardium, without apparently any fibrous structure. How they sustain the strain to which they are constantly exposed is a source of wonder to me. Here the aortic valves were obviously thickened, and somewhat shrivelled, one valve being in a more advanced condi-

tion of disease than the other two. There was but one coronary artery. At first the case seemed to be one of massive hypertrophy consequent upon aortic regurgitation, for the walls of the left ventricle were at least an inch and a half in thickness. Such, however, was not the case, and the explanation is not so simple, for on testing the valves they were found still to be perfectly competent, though distinctly diseased. The massive hypertrophy was not due to aortic regurgitation, but to some other cause, and the aortic disease was but a part of the morbid process. The aorta was enormously thickened, and there were upon it, about two inches above the valves, two spots of commencing atheroma, each about three-quarters of an inch across. The hypothesis which suggests itself is as follows: it was a case of Bright's disease, with those changes in the vascular system which are known to result therefrom. There is contraction in the arterioles, with obstruction to the blood-flow; high arterial tension, and consequent hypertrophy of the left ventricle. The muscular wall of the arterioles also becomes hypertrophied in time, so that, betwixt them and the hypertrophied left ventricle, the blood-pressure within the arteries is maintained at an abnormal height, and this overdistention of the arteries leads to atheroma in them by a slow chronic process. aortic valves are closed with abnormal force, and they too become implicated in the morbid process. If the kidneys of this horse could have been obtained, or had any history of its being ill and having passed bloody urine —a common malady in horses—been pro-curable, the hypothesis could probably be substantiated.

The lessons taught by this case are these. The hypertrophy of the left ventricle is not subsequent to and resultant from the valvelesion; it exists cotemporaneously with it, is to some extent precedent to the valve-lesion, and is even causally related to it. When we discover valvular disease in the heart, we almost universally regard the muscular changes as subsequent and consequential only, and entirely forget that some of the muscular change has preceded the valve change. Of course in mitral disease the result of acute valvulitis the muscular changes are entirely secondary to and subsequent upon the valve disease; but in the sclerotic or contracting form of mitral disease, the chronic form found in middle-aged and elderly persons, the valvulitis is the consequence of the strain put upon the valve-curtains in the systole of the powerful hypertrophied left ventricle,-found in chronic Bright's disease. Then, too, we see that aortic valvulitis is commonly not a disease per se, and the valvular changes the commencement of the patient's troubles; but, far from this, the inflammation of the aortic valves is one of the later outcomes of a widespread morbid process, viz., a long and per-

sistent high blood-pressure in the arteries from the hypertrophy of the two muscular ends of the arterial system,—the central left ventricle and the peripheral arterioles. This is a condition which is very common, but, as fragments of it are usually described as distinct entities and separate diseases, we have yet to learn to see the great pathological whole whose fragments, as the prominent apparent malady. will piece together and put together until we can erect the whole morbid process, and see how heart-changes-first muscular, then valvular, and then muscular again; true apoplexy from arterial rupture; atheroma from persist-ent over-distention of the arterial system; and angina pectoris (acute over-distention of the cardiac cavities)—are all linked together intimately as outcomes of a pathological condition which stands in a causal relationship to them all. We also see that the same pathological conditions of the heart are found in the horse as are found in man; and the changes in the vascular system of old horses which have always been highly fed ought to attract the attention of medical men more than they have hitherto done.

J. MILNER FOTHERGILL.

## PROCEEDINGS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF PHILADEL-PHIA.

THURSDAY EVENING, JANUARY 23, 1879.

THE PRESIDENT, DR. H. LENOX HODGE, in the chair.

(Continued from page 317.)

Enormous aneurism of thoracic aorta.

R. WILLIAM PEPPER, who had examined the patient during life, presented the specimens, with the following history, for Dr. William Savery, of Bryn Mawr:

He was 46 years old on the 22d of February last; by occupation a newspaper dealer, which business he has followed for many years on the line of the Pennsylvania Railroad.

From his boyhood he has been noted for feats of activity and endurance. His route extended as far as the town of Coatesville, and during the time when there were no Sunday trains on this road, it was his custom, in order to serve his patrons, to make an extra early start on the Sabbath, walk as far as the Paoli Hotel (nineteen miles) to breakfast, continue the journey up to Coatesville, distributing his papers on the way, dine there, and then walk back to the city in the afternoon, rising again the next morning at his usual hour, two o'clock, in order to reach the newspaper offices in good time to obtain his supplies.

Since I have known him, his constant habit of jumping on and off of trains in rapid motion has caused many a prediction among the passengers and officials that he would meet his death sooner or later from that cause. Within the past year, however, he has been more circumspect, feeling, no doubt, his growing inability to do as he used to, though very loath

to acknowledge it,

About three months ago he came to my office for professional advice, complaining of a lump in his back, which was growing rapidly, and becoming more painful than it had been when he first noticed it, five months before. On examination I found a swelling as large as the head of a child three months old, occupying the left side and back part of the chest, rising just below the inferior angle of the scapula, and extending from the verte-bral column to the edge of the trunk. There was at this time no discoloration of the skin, and nothing in the appearance of the swelling to indicate positively its character.

But upon applying the hand to it there was a very decided thrill noticeable, and by the ear a further proof of its aneurismal nature was found in the characteristic murmur accompanying every beat of the heart. facial expression of the patient was indicative of constant suffering, which a feeling of pride prompted him to conceal as much as possible. I prescribed a steady course of tincture of digitalis and tincture of iron, in moderate doses, with the use of anodynes at night to procure

rest when necessary.

I also strongly advised him to change his occupation, or to abandon his present one, as the constant exertion and excitement incident to such a life must be injurious. advice he declined to take, and continued to serve his papers until within about ten days of his death, when increasing suffering and weakness compelled him to remain in his room. In the interval I saw him a number of times, either at my office or at his own home, and found that the tumor increased rapidly in size.

The patient died quietly during sleep, on the night of the 20th ultimo, and I made the autopsy on the following evening, assisted by Drs. Hill and Smith, of Ardmore.

The body was considerably emaciated. The girth around the chest at most prominent part of tumor was forty-one and a half inches.

Heart appeared to be somewhat dilated, its color pale; the internal structure and condition not examined, as I knew you would be interested in seeing it opened, and therefore left it.

Lungs healthy; the left one considerably compressed and pushed upwards by the presence of the tumor below it; but on being removed from the chest its tissue seemed quite crepitant throughout.

Liver.—Natural in color and consistence; rather large, its weight being fully four pounds. Spleen .- Normal in size and structure.

Kidneys.—Apparently perfect, except that

the left one was adherent by a considerable portion of its capsule to the lower surface of the tumor.

Stomach, intestines, pancreas, etc., all of

natural appearance.

Aorta apparently sound till its descending portion reached the fourth dorsal vertebra, where it had dilated upon the right side, forming a small tumor about the size of a hen's egg, firmly adherent to the vertebra; this was filled with a soft clot.

Lower down, about opposite the eighth dorsal vertebra, the aortic wall had given way again, forming the main tumor, which occupied the left side, extending from a point op-posite the seventh rib to the kidney.

This was full of coagula, and so adherent to the vertebræ and ribs that it was impossible to remove it without tearing its walls to an extent that quite changes its appearance. About three pints of liquid blood were removed from the thoracic cavity, before displacing the tumor, but whether this had been an antemortem effusion from a rupture of the sac on its posterior surface, or was produced during the examination, it was difficult to deter-

The ninth, tenth, eleventh, and twelfth ribs were very much diseased, the first-named being separated about two inches from its articulation with the spine, and the others had almost disappeared from absorption and pressure by the tumor; also the corresponding vertebræ were extensively necrosed, as the specimens will show. The ninth rib continues adherent to the tumor.

The patient had syphilis in a severe form a number of years ago, which probably accounts

for the origin of the fatal lesion.

Aneurism of the ascending portion of the thoracic aorta, from a case treated by rest and a restricted diet. Presented by Dr. Louis

Iames --, æt. 41 years, a blacksmith by occupation, of temperate habits, was admitted to the medical ward of the Episcopal Hospital on November 2, 1877. family history was healthy. He denied ever having had venereal disease, but his statements in this respect were rather confused and probably incorrect. His health had been good until about five months before his application at the hospital, when, while working in his shop, he accidentally misplaced a heavy bar of iron, which, in falling, struck him across the breast, with a force almost sufficient to knock him down. Although none of the ribs were broken by the blow, the soft parts were considerably bruised, and he was obliged to rest for two days. Upon resuming work he began to suffer from pain, of a neuralgic character, in the upper part of the right chest, gradually becoming more severe; and six weeks later he noticed a projection of the chest-wall beneath the right clavicle, and an unnatural beating in the same position. Both the pulsation and the pain were greatly augmented by exertion, and this also caused paroxysms of coughing and dyspnæa: for this reason, as well as on account of failing strength, he was soon obliged to give up work entirely. While he remained quiet he was comparatively comfortable, but the tumor steadily increased in size up to two weeks before he came under observation, when it

seemed to stop growing.

When admitted he was weak, though in good condition as regards flesh. The eves were suffused, the lips purple, the face duskyred in color, the hands livid and cool, and the external jugular veins, and the superficial veins of the hands and arms, dilated and prominent. At the upper anterior portion of the right chest there was a hemispherical aneurismal tumor, measuring seven and a quarter inches transversely and eight inches in a vertical direction. The acromial extremity of the right clavicle was about an inch higher than the left, and the tumor extended from the lower edge of the bone to the fourth rib, and from the middle of the sternum to the margin of the axilla. The anterior portions of the second and third ribs at the site of the aneurism could not be felt, having evidently been eroded. The investing integument was tense, but unaltered in temperature and color. There was visible pulsation. The aneurism was firm and elastic and painless to the touch, the wall in the most prominent position was extremely thin, as if composed of little more than the skin, and a double impulse was felt, the more forcible stroke being synchronous with the cardiac impulse and attended by a uniform expansion of the sac. On auscultation two sounds were heard similar to, but louder than, those of the heart. Neither thrill nor murmur could be discovered. Percussion was dull over the whole surface of the upper third of the right chest, the liver dulness began at the usual level, and between these two regions of dulness there was a narrow band of impaired pulmonary resonance. Vesicular murmur and vocal resonance and fremitus were abolished over the upper area of dulness. respiration on the left side was puerile. apex-beat of the heart was situated in the fifth interspace, directly under the left nipple; there was no valvular murmur. The patient complained of occasional giddiness, and of a sense of distention and dull pain in the tumor. The respiratory movements were increased in frequency, and he had paroxysms of dyspnœa and ringing, unproductive cough. The pulse was equal in both radial arteries, and was feeble and moderately frequent,—about 100 per minute. His tongue was lightly coated, his appetite poor, and his bowels consti-pated. His pupils were equal, there was no hoarseness or dysphagia, and the urine was

Under treatment his condition improved

considerably, the giddiness and the cough and dyspnœa disappearing, the complexion becoming more natural, and the circulation slower. There was, too, less pain and pulsation in the aneurism, and on manipulation there was a feeling of increasing solidity. The improvement continued until January 15, 1878, when, without any apparent cause the symptoms of internal hemorrhage set in, and death followed in about four hours.

Inspection.—On opening the thoracic cavity a large quantity of recently-coagulated blood was found in the right pleural sac. The blood had escaped from a ragged opening, large enough to admit the point of the index finger. in the lower part of the aneurism, and completely filled the space between it and the liver, compressing the lower lobes of the lung against the spine, and forcing the liver an inch or more downwards. The aneurism sprang from the convexity of the ascending aorta, was globular in shape, and occupied nearly the whole of the superior third of the right chest cavity, the portion in the interior of the thorax being equal in bulk to that on the exterior. The wall immediately about the position of rupture was very thin, and composed of little more than the reflected pleura; the remainder of the sac was moderately thick, and was formed by the dis-tended arterial coats. The external wall was covered by the attenuated pectoral muscles and a layer of adipose tissue, both the wall and its coverings being thinnest at the most prominent point. The interior of the aneurismal sac was rough, and its cavity was occupied by a large, firm, non-adherent clot. This clot was laminated, the external layer was soft and recently formed, and upon the outer surface there were several small pieces of eroded bone. The lower edge of the first rib, the right border of the first piece of the sternum, the upper margin of the fourth rib, and both the sternal and vertebral extremities of the eroded second and third ribs projected into the cavity and were devoid of periosteum and roughened. The orifice of the aneurism was oval in outline, two inches and a half in length by an inch and a half in width, and was situated about an inch above the aortic valve. The aorta was atheromatous and somewhat dilated. The heart was small, the edges of the mitral leaflets were slightly thickened, and the aortic leaflets were less flexible than usual; the other valves were healthy.

The upper lobe of the right lung was compressed between the posterior part of the aneurism and the thoracic wall; it was adherent to the former and contained several isolated collections of caseous material. The middle and lower lobes were also compressed, though to a less degree. The pleura was opaque and thickened.

The left lung presented nothing abnormal, except a few old pleuritic adhesions. The aneurism pressed upon and partially obstructed the superior vena cava, the right pulmonary artery, and the right bronchus; the rings of the latter were bent inward, and the interior of the tube contrasted markedly with that of the opposite side.

There was no disease of the abdominal

viscera.

An interesting feature of this specimen is the firmness and size of the clot, which, though unattached to the sac, so nearly fills it that the blood in flowing through the aneurism must have spread out into a thin, broad layer. Now, although in order to effect a cure the deposit of fibrin should have been upon the interior of the sac and not free in its cavity, the presence of such an amount of fibrin shows an effort in the right direction, that in a less hopeless case might have been successful. This effort I cannot but attribute, in part at least, to the treatment adopted, viz., absolute rest in bed, and a restricted diet, medicines being used only to regulate the bowels, and upon one or two occasions to induce sleep.

Rest, the main factor in the treatment, favors the deposition of fibrin chiefly by slowing the heart's action. That it is really a therapeutic agent of importance may be judged from a case reported by Tufnell, in which the pulse when standing and in ordinary exercise was 96 per minute, after lying horizontally for a time 66, a fall of thirty beats per minute, and supposing the patient to have remained in bed, under ordinary circumstances, twelve hours out of the twenty-four, a difference during complete rest of 21,600 pulsations a day,—a reduction of great consequence. In my case the reduction was not more than twelve beats a minute, probably because of the impossibility of maintaining anything more than a semi-recumbent position.

The object of a restricted diet is to reduce the quantity of the blood without impairing its quality, so that while over-distention of the aneurismal sac is avoided, the conditions favorable for fibrinization are preserved. The same results cannot be obtained by the old methods advocated by Valsalva, either vene-section or venesection combined with starvation: on the contrary, each of these methods of treatment would produce an anæmic condition, reduce the fibrin, and tend to quicken

the circulation.

The quantity of food served in the present case was estimated by weight and measure, as follows. For breakfast, two ounces of bread and four fluidounces of milk. For dinner, four ounces of meat (beef or mutton), three ounces of bread or potatoes, and four fluidounces of water or "rice and milk." For supper, two ounces of bread and six fluidounces of milk. The aggregate, eleven ounces of solid and fourteen ounces of liquid food, would seem to be a very small allowance, were it not for the other element of the

treatment, much less food being necessary in a perfectly passive state of the system than during active life. The patient complained a little at first of the restraint and enforced abstinence, but was soon reconciled by the great improvement in the symptoms.

Tufnell\* records nine cases of aortic aneurism treated in this way, in all of which, after an average course of about eleven weeks, a marked improvement or an apparently perfect

cure resulted.

Tumor in right lobe of cerebellum. Presented by Dr. L. S. CLARK, for Dr. A. S.

GERHARD.

Rosina M., German, æt. 20 years, single; never been pregnant; housework; no previous disease except those incident to infancy and childhood in the usual form; no mechanical injury; father died of smallpox eight years ago; mother living and healthy; two brothers—one older, the other younger—died of pulmonary tuberculosis within six weeks preceding her own death; no hereditary tendency to disease in the family as far as memory reaches back, all the ancestors living to a good old age; uncles, aunts, and cousins are healthy; grandparents, both paternal and maternal, still living; three brothers, all younger, still living and healthy; died, April 25, of exhaustion due mainly to long-continued and intense pain in the head.

About the 1st of December, 1877, this "headache" first made its appearance, for which she was treated under the direction of Dr. H. W. Newcomet. On March 18, 1878, she passed into my hands, when she presented the following symptoms: bedfast, but able to help herself; decubitus right side; complexion fair; very pale; emaciation and bodily weakness rather considerable; skin moist, its temperature the same in both axillæ, varying from 100° to 102%; slight and loose cough, with but little expectoration of light greenish and consistent sputa; thoracic pain none, except the last few days of life; and, indeed, no general pain; percussion showed marked dulness over apices of both lungs, and auscultation revealed moist râles over the apex of the left, and bronchial breathing over that of the right lung; menstruation suspended for two months; appetite generally good, and digestion regular and normal; no hectic nor colliquative sweating, except during the paroxysms of headache; sweats cold and clammy; no cedema; no diarrhœa; occasionally vomiting, but only upon a full stomach and at beginning of a paroxysm of headache; heart-sounds indicating no organic disease; pulse varying from 120 to 130 per minute; no impairment of intellect; no paralysis; no convulsions nor any want of muscular co-ordination whatever. During the last few days, however, her face (during the paroxysms only) would be drawn

<sup>\*</sup> The Successful Treatment of Internal Aneurism, etc. London, 1875.

towards the left side, whether from muscular contraction on that side, or from relaxation of the facial muscles on the opposite side, I have not determined; and this was accom-panied by a rigid drawing backward of the head, by pain in the left shoulder and arm, and by a marked determination of sensation (not of motion) in the same shoulder and arm. The pain in her head was simply excruciating, at first involving the whole cranium, afterwards only the forehead and temples, but finally only the back of the head and nape of the neck. The pain in its character, as long as the paroxysm lasted, was constant, acute, without intermission; she was in fact not able to describe the precise characteristics of the pain. The paroxysms of pain recurred at something like regular intervals: at first, *Friday* was her "bad day," being comparatively free from pain during the rest of the week. Then for a period of two weeks (from March 23 to April 6) she was completely relieved, taking 1 grain doses of phosphorus three times a day, along with strychnine, quinine, and bromide of iron. From the latter date on she had a paroxysm either daily or every other day, generally from 8 to 12 o'clock A.M., until the last two days, when there was no intermission, when she died of sheer exhaustion. None of the many medicines given were of any avail in stopping the pain in the head.

The post-mortem, made ten hours after death by Drs. Leonardo S. Clark, H. W. Newcomet, and myself, revealed tubercles in the apices of both lungs, those in left softening, with a well-marked vomica and extensive pleuritic adhesions, and the right indurated. A very small heart. An enlarged and slightly fatty liver. A biliary calculus the size of a common cherry in the gall-bladder. The cerebrum was slightly softened, its arachnoid much congested, with an appearance merely of purulent matter underneath, and about the normal amount of serum in its ventricles. The cerebellum was normal as to appearance, the two lobes alike as to size, but the right lobe containing the tumor herewith respectfully submitted for examination; but, contrary to my full expectation, no apparent trace of tubercle in any part of the brain, unless the accom-

panying tumor be tubercular.

Report of the Committee on Morbid Growths.

"The tumor from the brain, presented by Dr. Clark and referred for examination, is found histologically to consist of numerous lymphoid cells in various stages of granular degeneration. Between the cells is seen a very indistinct, reticular, connective tissue. A transverse section of the blood-vessels shows their walls to be infiltrated with lymphoid cells, and their lumen containing the débris of blood-elements and cells, completely obliterating the vessels. The new formation is a tuberculous growth.

" February 13, 1879."

## REVIEWS AND BOOK NOTICES.

PRESCRIPTION-WRITING. Designed for the Use of Medical Students who have never studied Latin. By Frederic Henry Gerrish, M.D. Second Edition. Portland, Me., Loring, Short & Harmon. Philadelphia, J. B. Lippincott & Co., 1878. 16mo, pp. 51.

A Manual of Prescription-Writing, etc. By Matthew D. Mann, A.M., M.D. New York, G. P. Putnam's Sons, 1878. 16mo, pp. 155.

These two admirable little books are in some sort complemental to each other. Dr. Gerrish's book, which has been already appreciated to the extent of reaching a second edition, is divided into two parts. The first gives rules for writing prescriptions, including tables of declension; in the second part are collected the Latin words which are used in naming the drugs and preparations of the United States Pharmacopæia and such unofficinal medicinal articles as are extensively ordered in prescriptions; also other words which are necessary or convenient in pre-scription. Dr. Gerrish's object is limited, but within the limits his book is perfectly clear and very satisfactory. Dr. Mann has aimed at something a little different. Besides giving an explanation of the methods of correctly writing prescriptions, he gives a very full and satisfactory table of doses, expressed in both the apothecaries' and metric systems; rules for avoiding incompatibilities and for combining medicines, etc. To the student or practitioner thoroughly conversant with the principles of pharmacy, but ignorant of Latin, the first of these manuals would be sufficient; for the same individual understanding Latin. but weak in pharmacy, the second would be preferable. One would be safe in having both, and sure of getting much useful information in a handy form.

THE CROONIAN LECTURES ON CERTAIN POINTS CONNECTED WITH DIABETES. Delivered at the Royal College of Physicians. By F. W. Pavy, M.D., F.R.S., Fellow of the College, etc. 8vo, pp. 126. London, Churchill, 1878.

Dr. Pavy has taken the opportunity, in these lectures, to reiterate and further sustain the position he early took with regard to the sugarforming function of the liver,—that such function does not exist during life; that the liver is rather a sugar-assimilating organ, the object of which is to work up the sugar and starch ingested and to prevent them from reaching the general circulation in quantity sufficient to render the urine appreciably saccharine; and that in diabetes the fault lies essentially in the passage of sugar into the general circulation in opposition to what ought to occur. In other words, in diabetes the as-

similative action of the liver is not properly exerted, and the sugar is allowed to pass into the general circulation, causing the urine to acquire a more or less saccharine character. Bernard, on the other hand, claimed that, independent of the sugar derived from the sugar and starch ingested, this substance is actually produced in the liver during life; that the liver is a true glycogenic or sugarforming organ: that the sugar thus produced passes into the general circulation, and is oxidized in the systemic capillaries, chiefly in those of the muscles. Both Bernard and Pavy agree that in the liver there is produced an amyloid substance, for which the name zoamylin has been suggested. Dr. Pavy proposes that it be called bernardin. But, according to Bernard, it is an intermediate substance into which nitrogenous matter is converted on its way to form sugar; while, according to Pavy, it is a substance into which, in health, *sugar* is converted, and which is stored in the liver for future force production. Pavy also admits the conversion, to a degree, of nitrogenous matter into amyloid substance. In diabetes, either this conversion of sugar into amyloid matter does not take place, or the amyloid matter is reconverted into sugar, and as such enters the circulation, whence it is removed, in appreciable amounts, by the kidneys. Pavy considers the former as more likely.

It would be impossible to follow Dr. Pavy in his argument to sustain his position, but he asserts that Bernard's volumetric method of testing is fundamentally fallacious, and substitutes a gravimetric method of his own, in which there would appear to be no fallacy. This being admitted, his analyses, while they show the presence of a small amount of sugar in the blood, show no difference in the quantity in the arterial and venous fluid, and no more in the blood of the hepatic vein than in either, nor more in the living liver or the organ at the moment of death, than in the arterial or venous blood. After death, however, the amyloid substance in the liver is rapidly converted into sugar, in which, then, large amounts are found. Admitting no fallacy in his test and its application,—and we confess to finding none in a somewhat close examination,—his position would seem well sustained, so far as the glycogenic function of the liver is involved. Then he shows, experimentally, that an "imperfectly dearterialized" state of the blood causes glycosuria, probably by preventing the proper assimilation of the sugar in the liver; and thence reasons that a dilated state of the arteries, such as is necessary for this, is most likely to be produced by certain textural alterations in

the brain.

Whatever may be the final settlement of this mooted subject, Dr. Pavy's last work contributes a vast amount of valuable information on the subject, and deserves the close study of the clinician as well as of the physiologist.

LECTURES ON BRIGHT'S DISEASE OF THE KIDNEYS. Delivered at the School of Medicine of Paris. By J. M. CHARCOT, Professor in the Faculty of Medicine of Paris, etc. Collected and published by Drs. Bourneville and Sevestre. Translated, with the permission of the author, by Henry B. Millard, M.D., A.M. 8vo, pp. 100. William Wood & Co., New York.

It is always interesting to read the views, on any subject, of a writer of recognized eminence, whether it be that on which his reputation has been founded or not. such, the lectures of Charcot on Bright's disease will be welcomed by all medical readers. As might be expected, however, they contain no new contributions to the pathology or therapeutics of the subject, differing, in this respect, very greatly from the writings of the same author on the nervous system. work presents a fair but not very full or accurate exposition of the pathology and symptoms of the conditions usually included under the term Bright's disease or diseases, such as we would expect to find in reported rather than carefully written lectures on the subject. The matter of treatment is not included.

Charcot adopts the view of multiplicity in the forms of Bright's disease, which he justly terms the English theory, in contradistinction to the older one of unity, or that which makes the different forms different stages of one affection. In this he agrees with modern pathologists generally. Beginning with an account of the normal histology of the kidney, tabular infarctions, including casts, are first considered in a general way. Less clinical significance is attached to casts than is usually done, and we think rather less than they deserve. The contracted kidney, the large white kidney, scarlatinous nephritis, and the amyloid kidney, are then considered

The work of the translator is not always satisfactory, there being occasional obscuri-ties in the translation. The drawings are coarse, and the general impression on the careful reader is that of somewhat hasty book-making.

STUDIES IN PATHOLOGICAL ANATOMY. By FRANCIS DELAFIELD, M.D., Adjunct Professor of Pathology and Practical Medicine in the College of Physicians and Surgeons, New York. Fasciculus No. 5, June, 1878. William Wood & Co.

Parts 1, 2, 3, and 4 of this series of studies were noticed in the number of this journal for October 26, 1878. The present part includes Hydrothorax, Chronic Pleurisy with adhesions, the Pleurisy of Chronic Phthisis, and Tubercular Pleurisy, with three plates, showing the alterations in the pleural endothelium in the first, second, and fourth of the conditions named. The same excellence in the execution of the plates and the same care in description which characterized the former parts are maintained in the present, and if the series is continued, as we hope it may be, it will result in a most complete atlas of pathological histology, with descriptions of convenient length to be most useful to practitioners and teachers.

AN INTRODUCTION TO PATHOLOGY AND MORBID ANATOMY. By T. HENRY GREEN, M.D. Lond. Third American from the fourth revised and enlarged English edition. Philadelphia, Henry C. Lea, 1878.

An extended notice of the present edition of this now popular work on pathology is not required, in view of the fact that past editions have received full consideration. The author informs us that he has again added much new matter, with the object of making the work a complete guide for the student. All the chapters have been carefully revised, and a large addition has been made to the number of the wood-cuts. Among the additions is one on the "Muscular Changes in Typhoid Fever," with a cut; one on "Scrofulous Inflammation," with a cut; new matter and illustrations in the sections on "Syphilis," "Endocarditis," and "Phthisis." The book has deservedly earned an acknowledged position among the text-books on pathology.

Physiology: Preliminary-Course Lectures. By James T. Whittaker, M.A., M.D., Professor, etc. Illustrated. Cincinnati, Chancy R. Murry, 1879.

A small book in octavo form, two hundred and eighty-two pages, containing lectures "on the foundation facts and principles upon which physiology is built." The students of the Medical College of Ohio can be content if all their teachers give proof of the same deep and manifold study as these lectures, delivered during the preliminary course, are evidence of. Hypocrisy and superstition would soon disappear, and the medical profession in our great country would be in every respect the advance-guard of civilization, if it were possible to promulgate the study of physiology and to omit nothing it teaches.
"The exhibition of life is no more due to an innate principle, a separate essence, a quid intus, than is the registry of time in a clock," are words that give us an idea on what scientific basis the author wishes the modern physician to stand. "It is no answer whatever to say that life is creation. Such an assertion may satisfy the wants of the emotions, but it will in no way appease the demands of the intellect trained, by cultivation in physical science, to entirely ignore unnatural explanations for natural events." We know a lecturer on physiology in a large medical school who would tremble to utter such words, less yet put them in print. The author's descrip-

tion of the influence of physiology on practice and practitioners; his almost poetical rendering of the conservation and correlation of force; the origin and evolution of life and its forms, wherein he follows Darwin; and his masterly lectures on protoplasm and its properties, and on bone, muscle, nerves, and blood, form together a series of instructions which may not be only of value to the student of medicine, to give him a deeper inside view of the workshop of nature, but which should be read by every individual claiming classical modern education. There can be no doubt that, if the author somewhat differently arranged his book, to make it accessible to a larger circle of intelligent laymen, this volume, as well as its author, would soon be as favorably known, wherever the English tongue is spoken, as, for instance, the works of Bock, Buchner, and Moleschott are in Germany. We have never before seen, in the English language, a book on a subject connected with physiology, where so much is condensed into such a small space, and where, with a scholarly English, the rare facultas docendi is so effectively made use of. "Du sublime au ridicule il n'y a qu'un pas" is so frequently lost sight of in these condensed works on momentous questions, that they only should be written by a master-mind who thoroughly controls his subject.

The author cites, with the same facility, Jansen, Kant, Koerner, Molière, Shakspeare, and Schiller, with which he quotes Haller, Harvey, Haeckel, Kölliker, Tyndal, Schwann, Virchow, Carl Vogt, and Goethe, the latter in his double capacity as poet and naturalist. That he mentions, besides these names, many others well known in the history of biology, the reader can imagine from the nature of the subject. The work is made more interesting yet, by the author giving, of each different subject he speaks of, a history of its evolution; i.e., he follows up the gradual development of each theory from its beginning to its present condition. The latest achievements of comparative embryology are noted and made more apparent by well-executed drawings. We heartily recommend our readers to add this small but valuable book to their library, and are only sorry that want of space forbids us to give a larger abstract from it.

## GLEANINGS FROM EXCHANGES.

INVOLUNTARY ROTATION OF THE HEAD CURED BY CONTINUED PRESSURE ON THE NECK.—Dr. Heaton (British Medical Journal, February 15, 1879) had under his care a healthy woman of 22, who, after having been overworked at one period four years previously, began to have tremors, affecting the head and right arm. Blisters on each side of the spine caused the tremors to cease during

six months; then the movements began again. When first seen by Dr. Heaton, her head rotated, when she was in the upright position. with about one hundred to-and-fro movements per minute, in regular time. She was quite unable to restrain this movement, except by supporting the head with her hand; firm pressure was required to keep the head at rest. When she lay down the movement ceased. No other unnatural movements existed. Conjum, arsenic, and inunctions, with helladonna liniment, were employed in vain. One day it was discovered that firm pressure with the finger over a spot a little below and anterior to the root of the ear, immediately behind the angle of the jaw, had the effect of completely arresting the movement. Pressure on either side had the effect, but on the left was most efficient. An apparatus was subsequently contrived, consisting of a curved steel band fitting on the back of the neck, and having at each end a small pad resting upon one of the pressure-points, and of which the pressure could be regulated by a screw. This the patient could wear comfortably, and it was quite hidden by a neckerchief. By the end of two months the patient was well, and could discard the use of the apparatus. She had still, sometimes, twitchings in her eye and

Bromine in Laryngeal Croup.—Dr. W. Redenbacher (*British Medical Journal*, 1879, p. 234; from *Aerztliches Intelligenz-Blatt*), called to the case of two little girls, aged respectively 5 and 7, suffering with severe croup of the larynx and air-tubes, ordered a table-spoonful of the following mixture to be taken

every hour:

R Decocti altheæ, fʒiv; Potassii bromidi, ʒi; Bromi, gr. ivss.; Syrupi simplicis, fʒi.

On again visiting the patients, whom he did not expect to find alive, he was most agreeably surprised. The difficult breathing, dry hard cough, etc., had all disappeared; the breathing was free, and the cough loose; several portions of croupal membrane had been coughed up. Recovery followed, without toxic symptoms. For children under one year, the quantity of bromine in the mixture should be reduced to one grain and a half, and for those from one to four years old, to three grains.

EPIDEMIC QUINSY.—Dr. Grosholz (British Medical Journal, 1879, p. 76) describes this as follows. At the commencement, the patient complains of lassitude, pains in the limbs, slight shiverings, and disordered stomach. Marked fever sets in, with pricking in the throat and a propensity to hawking. The throat and tonsils are seen to be enlarged and inflamed, the redness extending over the pharynx and uvula. Yellowish-opaque spots, and sometimes even large patches, appear on the tonsils. These can easily be detached,

and probably consist only of the accumulated secretion from the follicles. There is much tenderness under the jaw, and the salivary and adjacent lymphatic glands are generally swollen and painful. The tonsils do not become very greatly enlarged; they are of a deep-livid hue, glazed and shining. The temperature rises to 102° or even higher. Towards evening there is great restlessness, and sometimes delirium. The patient soon becomes weak and low, and the difficulty in swallowing tends to increase the prostration. The disease reaches its height on the fifth or sixth day, after which the patient gradually commences to improve. There is no crisis, and, as a rule, the tonsils do not suppurate. There are no sequelæ, except a slight weakness of the throat and tendency to take cold.

The treatment is, first, a saline aperient, and then, for two or three days, a saline mixture. Subsequently, tonics, and especially quinine, are useful, and may be necessary. Wine may be given when the patient is low. Milk and beef-tea form the best diet. A warm atmosphere is beneficial, and frequent irrigation of the throat with warm water may be practised. Occasionally, in severe cases, the tonsils may be painted with glycerin and tinc-

ture of iron.

CASE OF ŒSOPHAGOTOMY.-Dr. George W. Gay reports (Boston Medical and Surgical Journal, 1879, p. 356) the case of a woman in whose throat a thin fish-bone, 11 in. long by 1/3 in. wide, became impacted. When first seen, thirty hours after the accident, she could only swallow a few drops of fluid; no solid food had been taken from the first. There were two sore points,-one near the cricoid cartilage, which had persisted from the beginning (a probang had been used at first), and another opposite the centre of the sternum, which came on later, giving the patient the impression that the foreign body had moved downwards. The symptoms not being urgent, operation was delayed. The next day the patient was worse,-restless, anxious, and dejected; pulse 100; temperature 100.5°. Deglutition was accomplished only after repeated and strenuous efforts. Careful trials to remove the foreign substance with sponge and bristle probangs failed. The patient was then etherized, on a table, and, the head and shoulders being well raised, œsophagotomy was performed. An incision three inches in length was made on the left side of the neck, midway between the median line and the anterior border of the sterno-cleido-mastoid muscle. The dissection was continued down to the œsophagus, the various vessels, etc., being held back by retractors. At the bottom of the wound a sharp substance was at once detected, pricking through the walls of the œsophagus. It was seized with dressing-forceps, and, by careful manipulation, was made to cut its own way out, pus flowing by its side. The bone was imbedded in the posterior wall of the esophagus, opposite the cricoid cartilage. The esophageal wound, being so small, was allowed to take care of itself; the larger wound was closed with silk sutures. The patient was fed solely per rectum for four days; after that she drank freely. The patient left the hospital on the twentieth day after the operation, quite well, and with a natural voice.

Case of Recovery from Leprosy.—Mr. Jonathan Hutchinson reported a case of complete arrest of the progress of true leprosy to the Medico-Chirurgical Society recently (British Medical Journal, 1879, p. 232). The patient had been under observation twenty-seven years. She was a Jewess, born of parents who had lived only in England, of a family in which no leprosy taint existed. At the age of 32 she went to live in Jamaica, and twelve years later she returned, the subject of leprosy in a severe form. The tubercular and anæsthetic symptoms were present in combination. For the last twenty years she had considered herself well. Mr. Hutchinson believed the chief element in the cure was change of residence, and consequent

change of diet, especially cessation from fish.
A VEGETABLE PEPTONE-ALBUMEN SOLU-TION FOR THE USE OF THE SICK .- Dr. F. Penzoldt, of Erlangen (New York Med. Record; from Deutsche Med. Wochen., Nos. 33 and 34, 1878) prepares from pea-flour, by means of pepsin and salicylic acid, a vegetable peptone solution which he has found by clinical experience to possess great practical value. He recommends it as a supplement to, not as a substitute for, Leube's meat-solution, over which, however, it possesses the advantages of being much less costly and less troublesome to prepare, and of being very agreeable to the taste. The method of preparation is very simple: 8 ounces of finely-powdered peaflour, one quart of water, 15 grains of pure salicylic acid, and  $7\frac{1}{2}$  grains of pepsin (it is most important that this last should be of an excellent quality) are thoroughly mixed to-gether, and then left in a warm place (not above 100° F.) for twenty-four hours, during which time the mixture must be frequently stirred. It is then filtered through thick linen, which retains the starch, and the peptone-albumen solution is obtained. It has the appearance of pea-soup, and a delicately sweetish taste. The salicylic acid was at first added, in Dr. Penzoldt's preliminary experi-ments, to prevent the fermentation that sometimes occurred; but he soon found that it could be substituted for the hydrochloric acid, as it possessed fully as much, and perhaps more, digestive activity.

Before the solution is used it should be gently heated over a water-bath, and at the same time it may be reduced somewhat in volume, so that only enough to fill two soupplates—a sufficient quantity for one day—remains. In warming, a portion of the albumen

separates in the form of small flocculi, and a thin, mechanically unirritating pap is formed, which contains the peptones in solution. Salt must be added to it in proper quantities, and it may be flavored to taste with root and fruit reports several cases in which this solution acted very satisfactorily, among them being some cases of ulcer and catarrh of the stomach, and one each of dysentery and diabetes. In all the cases it was well borne, and the patients took it willingly, and improved on it. It seems to be applicable more especially in cases of gastric ulcer and of chronic catarrh, dilatation. and carcinoma of the stomach, but also in cases of chronic catarrh of the intestines, dysentery, convalescence from typhoid fever. anæmic conditions with weak digestive powers. diabetes, etc.

The same solution may be employed as a nutritive enema; only in its preparation for this purpose the pancreatic ferment must be substituted for the pepsin. The following is the formula for it: 8 ounces of pea-meal, 1 pint of water, 15 grains of salicylic acid, and 10 drops or more of pancreatin-glycerin; mix well, and allow it to stand for several hours to a day in an ordinary temperature. During this time some peptonization takes place, but no sugar is formed. The fluid is then simply poured off, a little of the meal being allowed to go with it, and the nutritive enema is ready. There will be about enough for two clysters, which may be administered with any ordinary syringe. In the rectum more peptones and some sugar are formed, and in favorable cases are entirely absorbed. The injection is, as a rule, well retained. One patient, a phthisical man, retained it for four hours, and asserted that he experienced a feeling of contentment after it. After four hours he passed some feculent masses, in which no peptone-reaction could be demonstrated, although the injected solution presented this reaction very distinctly.

EFFET A DISTANCE.—A correspondent writes to the *British Medical Journal*, relating the case of a female patient who "was never troubled with after-pains." When asked how she prevented their occurrence, she said that, in accordance with the advice of a "woman from America," she had, during her last two labors, put some steel, in the shape of carpenters' tools, under her bed, and had had no after-pains, though formerly she had suffered very much. The correspondent relates a parallel case, that of an old lady subject to cramps in the extremities at night, which she prevents by having a piece of rock-sulphur placed in her bed. If this is removed, even unknown to her, she is sure to suffer. "So much is now written about metallo-therapy," says the correspondent, "that if any of your readers can give an explanation of the above cases they will oblige."

PLASTIC FLOUR.—A specimen of flour exhibited at the Lord Mayor's court in London,

recently, was shown to contain seventy per cent. plaster of Paris. To demonstrate the nature of the spurious flour, the health-officer exhibited the plaster head of a donkey made from it. Whether his Worship considered this in the light of a personal affront to a relative is not stated, but he "most rudely and unjustifiably declined" to have the flour condemned.

## MISCELLANY.

A NEW INDUSTRY.—The "awful examples" of the effects of drunkenness held up to abhorrence by temperance advocates have heretofore usually been living. More recently it appears that the aid of pathology has been sought to enforce habits of sobriety. The following note has been sent to the editor of the *Lancet* by a correspondent:

"SIR,—My attention has just been drawn to the enclosed advertisement in a paper called the Bazaar, Exchange, and Mart of this day's

date:
"'First-class slide of drunkard's liver, also
of healthy liver, for comparison, with explanatory remarks. Post free, 3s. 2d., from Dr. —."

Post free, 3s. 2a., none Dr. "Yours faithfully, "F.R.C.S.

"February 22, 1879."

The correspondent is shocked by this public barter of human viscera, but we should like to see the custom extended. We have seen specimens of "sclerosis of cheek" on the part of patients trying to dodge the payment of bills, which, properly mounted, could be made most effective as warnings to young and inexperienced doctors inclined to trustfulness.

UNCOOKED FOOD AS DIET.—A German physician has started a theory that all food should be eaten raw, as all the nutritive qualities meat and vegetables possess are in a great measure, if not entirely, destroyed by cooking. Persons afflicted with gout, rheumatism, or indigestion are advised to try uncooked food, such as oysters and fruit, and they will find all medicines unnecessary. The yearning for drink, says this German philosopher, is caused by the unnatural abstraction of the aqueous element from the "solids," which, as in the case of uncooked beef, for instance, amounts to seventy or eighty per cent. All this might pass, and be deemed worthy of consideration, but when the same learned pundit goes on to say that clothes are a mistake, most people will give him up. Apart from appearances being against him, the recent severe weather is not favorable to his theory.-Medical Press and Circular.

DEATH OF THREE WELL-KNOWN FRENCH PHYSICIANS.—Intelligence has been received of the death of Bazin, the veteran dermatologist; of Ambroise Tardieu, the distinguished authority on medical jurisprudence; and of Dr. Chauffard, Professor of General Pathol-

ogy. The latter was a brilliant lecturer, but for some reason—political, probably—very unpopular with the Parisian medical students.

COLONEL WARING, the distinguished sanitary engineer, is described in the Sanitarian as coming from Newport, "a fishing village on the New England coast, where his nostrils are regaled by the prophylactic odor of defunct fish and the salubrious exhalations of riparian deposits; where the water is rich and sparkling with stimulating nitrates, and where the mere suggestion of sanitary reform would be considered as a public insult."

GIANT BIRTH.—Dr. A. P. Beach reports (New York Medical Record, March 22) a labor, in the case of Mrs. Bates, 7 feet 9 inches in height, whose husband is 7 feet 7 inches in height. The amniotic fluid amounted to five gallons. There was inertia, making the labor difficult; but the patient was finally delivered of a healthy child weighing 23<sup>3</sup>/<sub>4</sub> pounds; height, 30 inches; breast-measure, 27 inches; breech, 27 inches; head, 19 inches; foot, 5<sup>1</sup>/<sub>2</sub> inches in length. The secundines weighed to pounds.

JEFFERSON MEDICAL COLLEGE.—At a meeting of the Board of Trustees of the Jefferson Medical College, held Thursday evening, 3d instant, in the hospital building, Dr. William S. Forbes was elected demonstrator of anatomy. The other candidates were Dr. Henry C. Chapman, Dr. W. W. Keen, and Dr. John B. Roberts.

DR. GEORGE B. WOOD died March 31, at 12.45 A.M., in the 83d year of his age. A full obituary of him will appear in our next issue.

#### OFFICIAL LIST

- OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY FROM MARCH 23 TO APRIL 5, 1879.
- TILTON, H. R., MAJOR AND SURGEON.—Assigned to duty at Fort Riley, Kansas, relieving Assistant-Surgeon Kilbourne. S. O. 53, Department of the Missouri, March 20, 1879.
- EWEN, C., CAPTAIN AND ASSISTANT-SURGEON.—Granted leave of absence for twenty days on account of disability. S. O. 45, Department of the East, March 24, 1879.
- Moseley, E. B., First-Lieutenant and Assistant-Sur-Geon.—Granted leave of absence for six months on surgeon's certificate of disability, with permission to leave the Department of the Platte. S. O. 71, A. G. O., March 24, 1879.
- DE LOFFRE, A. A., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—Assigned to duty as Post-Surgeon at Jackson Barracks, New Orleans, La. S. O. 47, Department of the South, March 19, 1879.
- Reed, W., First-Lieutenant and Assistant-Surgeon.—Granted leave of absence for one month, with permission to apply for fifteen days' extension. S. O. 34, Department of Arizona, March 14, 1879.
- KILBOURNE, H. S., FIRST-LIEUTENANT AND ASSISTANT-SUR-GEON.—Assigned to duty at Fort Reno, Indian Territory. S. O. 53, c. s., Department of the Missouri.
- Powell, J. L., First-Lieutenant and Assistant-Sur-GRON.—Assigned to duty as Post-Surgeon at Fort Griffin, Texas. S. O. 65, Department of Texas, March 29, 1879.

# PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, APRIL 26, 1870.

## ORIGINAL COMMUNICATIONS

ON THE THERAPEUTIC USE OF JABORANDI AND PILOCARPINE IN EYE-DISEASES.

BY M. LANDESBERG, M.D.

THE credit of having first introduced jaborandi into the oculistic practice belongs, for aught I know, to Wecker. He employed it in cases of serous cyclitis and opacities of vitreous humor. vol. iv., 2, of Handbuch der gesammten Augenheilkunde, edited by Alfred Graefe and Theodor Saemisch.)

Fronmüller (see Nagel's Jahresberichte der Ophthalmologie, 1876) tried jaborandi in various affections of the eye, and found it a very useful remedy in cases of catarrhal

affection.

Schoeller (see Nagel, ibidem) praises the successes obtained with jaborandi in cases of iritis, chronic and acute choroiditis, progressive myopia, neuritis, amblyopia with central scotoma, amblyopia potatorum, and especially in morbid processes based on syphilis. This remedy was also of great effect in cases of scleritis, acute conjunctivitis, and rheumatic paresis.

Weber first employed the alkaloid of jaborandi — pilocarpine — in eve-diseases. (See Centralblatt für Medicinische Wissenschaften, 1876, p. 769.) He used, hypodermically, the muriate of pilocarpine. manufactured by Merck, in Darmstadt, in doses of one ccm. of a two per cent. solution, and gives high praise to its rapid effect in cases of opacities of the vitreous, consecutive to chronic irido-choroiditis. Free secretion of saliva and profuse sweating set in a few minutes after the administration of the injection. Emesis did not

Additional trials made by Scotti in Weber's Clinic (published in Berliner Klin. Wochenschr., 1877, No. 11) corroborated the first statements. The remedy proved to be of great efficacy in cases of opacities of the vitreous, consecutive to irido-choroiditis, being successful even in those cases where every other remedy had failed.

Schmidt-Rimpler (see Berliner Klinische Wochenschr., 1878, No. 24) recom-

mends the application of hypodermic injections of muriate of pilocarpine, in doses of one ccm. of a two per cent. solution, in cases in which diaphoretic remedies are otherwise indicated. A specific action in irido-choroiditis he never observed.

Just, of Zittau (see Schmidt's Tahrbücher der Medizin, 1878, Heft 7), made use of pilocarpine in a case of fresh detachment of retina, with favorable result. In other cases of old detachment of retina the remedy was not effective. But it proved to be of great efficacy in cases of opacities of the vitreous and inflammation of retina, and in exudative processes following extraction of cataract.

The most detailed account of the new remedy is given by Dr. Ernst Fuchs, assistant of Professor Arlt, in Vienna. In the numbers 37 and 38 of the Wiener Med. Wochenschrift for 1878, he publishes the report of eighteen cases of eve-diseases. which were treated in the clinic of Professor Arlt by means of hypodermic injections of muriate of pilocarpine. Of these there were five cases of acute irido-choroiditis, three cases of chronic irido-choroiditis, two cases of opacities of vitreous, five cases of detachment of retinatwo cases of neuro-retinitis with hemorrhages, and one case of parenchymatous keratitis.

In regard to the unfavorable after-symptoms of pilocarpine, there was observed vomiting in seven patients, asthma in one patient, pain in the genital organs, complicated with dysuria, in one patient. In two cases vomiting and the consequent prostration were so violent that the use of pilocarpine had to be discontinued.

In regard to the therapeutic actions of pilocarpine, Fuchs arrives at the following conclusions: muriate of pilocarpine is the most energetic agent to effect resorption as well of serous effusions (in cases of detachment of retina) as of organized fresh exudations (opacities of the vitreous). one case of acute irido-choroiditis four injections brought vision from 6 to 6. In cases of old opacities of the vitreous no success was obtained. Pilocarpine proved to be totally ineffective also in all those opacities of the vitreous which remain consequent upon choroiditis. Of five cases of detachment of retina four were treated successfully, one case without success. In

the case of neuro-retinitis, pilocarpine was In the case of parenchymaineffective. tous keratitis, treatment resulted in diminishing hyperæmia and in relieving the

severe pain.

In regard to the high value and importance of jaborandi and its alkaloid not only for oculistic practice, but also for general medicine, I think I am justified in publishing in extenso the results of my trials made with this remedy as well in my private practice as in my dispensary.

For my experiments I used the fluid extract of jaborandi and muriate of pilocarpine, the former in internal doses, the lat-

ter as subcutaneous injections.

A. Extract of jaborandi was used in the following cases:

Case I.-G. Z., iron-workman, 36 years old, came under my notice November 28, 1877,

with the following condition:

Right Eye.—Anterior chamber is filled up with blood to its upper third. Of iris only the upper periphery is to be seen, which appears of greenish color and slightly swollen. Cornea is clear. There is intense subconjunctival injection and ecchymosis of conjunctiva of the eyeball and of the lids. Vision sunken to quantitative perception of light. This condition has been caused, according to the statement of the patient, by a blow which he re-

ceived the previous night.

Therapeutics.—Thirty drops of extr. jabor. fluid, to be taken in half a cupful of warm tea.

This dose had only a sialogogue, but not a diaphoretic effect. Secretion of saliva lasted for about half an hour.

I ordered sixty drops, to which thirty drops more were to be added if, half an hour after,

perspiration should not be sufficient.

After sixty drops ptyalism began in five minutes, and slight perspiration after fifteen minutes. Patient took thirty drops more, whereupon profuse perspiration followed, especially of the head. Secretion of the lachrymal glands was somewhat increased. Slight nausea and tinnitus of the ears were the only after-symptoms.

The diaphoretic and sialogogue effect lasted

for about an hour and a half.

The use of jaborandi in doses of ninety drops for six succeeding evenings resulted in an almost total resorption of the blood of the anterior chamber. Vision became  $\frac{20}{30}$ . Vitreous and background of the eye proved to be normal.

Case 11.-K. H., laborer, 56 years old, came to me January 3, 1878, in the following con-

Left Eye.—Small suppurating wound in the middle of the inferior lid. Cornea clear. The inferior third of the anterior chamber is filled up with blood. Iris greenish, slightly hyperæmic, pupil somewhat contracted, of normal reaction. Disseminated ecchymoses of the conjunctiva of the eyeball. Vision, counts only fingers at 2'. Field of vision limited upwards and outwards, but quantitative perception of light is good in all parts. Of the background of the eye only reddish reflection

Diagnosis.-Hemorrhage in vitreous, and

likely peripheric detachment of retina.

Three days previous to his coming under my notice, patient was struck by a piece of wood on the eyeball.

Therapeutics.—Sixty drops of ext. jabor. fluid. in warm tea, with the direction to take twenty drops more if within thirty minutes the perspiration should be too slight.

Ptyalism set in after five minutes, perspiration after ten minutes. The action of the drug was powerful, and lachrymation much increased. Patient suffered from headache, pressure in the forehead and temples, and glimmering before the eyes. Besides there was pain in the epigastrium and in the geni-Vomiting occurred twice. The secretion of saliva and perspiration kept on for an hour and a half.

The further doses were thirty and forty drops, respectively. Patient bore these doses better, but emesis always occurred, preceded by headache and followed by nausea. From the third day of treatment a slight gastric

catarrh set in.

After jaborandi had been used ten times, the extravasation of the anterior chamber and of the vitreous had vanished. Field of vision became normal, and vision 20. Background of the eye showed two small hemorrhages near macula lutea. No detachment of retina.

Patient being satisfied with the result,

omitted further treatment.

Case III.—B. W., bricklayer, 31 years old, presented himself March 4, 1878, in the fol-

lowing condition:

Right Eye.—Small inward wound of the inferior lid. Small superficial ulceration on the upper inner periphery of the cornea. Anterior chamber full of blood. Perception of light and of movements of the hand only central.

In crushing stones patient was struck by a piece on his eye, which was followed by instantaneous blindness.

Therapeutics.—Paracentesis corneæ and

compressive bandage.

On the following day the anterior chamber was again filled up with blood, and there was subconjunctival injection and cyclitis. Intraocular pressure was increased. Patient complained of having suffered much pain during the night.

I ordered fifty drops of ext. jabor. fluid. in

warm tea.

The effects were very stormy. Patient vomited several times, and had free evacuations. Pain of abdomen, headache, press-

ure in the forehead and the temples, and glimmering before the eyes were very violent. Secretion of saliva and perspiration was very profuse. Patient was very much prostrated, and afraid of the mere thought of continuing this kind of treatment.

So much of the blood was resorbed that the color of the iris could be distinguished. The symptoms of irritation and cyclitis had subsided. Intraocular pressure was normal. There was perception of light also in the peripheric

I persuaded patient to continue the treatment and to take only thirty drops. But even then the after-symptoms, as vomiting, pain in abdomen, and headache, were so violent and gastritis so considerable that patient resisted

further treatment.

When I had occasion to examine him five months afterwards, I found a concentric rupture of retina around the optic disk with large deposits of pigment. There was atrophy of the optic nerve and slight strabismus.

Case IV.—S. W., laborer's wife, 50 years old, came to me June 5, 1878, with the following

condition:

Left Eve.—Cornea clear and of normal curvature. Slight hemorrhage at the bottom of the anterior chamber; the inferior half of the iris is covered by a thin clot of blood. Iris of greenish color. Pupil of normal shape and dilatation, but of sluggish reaction. Ten-sion normal. There is only quantitative perception of light, which is dubious upwards. On atropia pupil is medium dilated. Fundus oculi cannot be seen. Considerable hemorrhage in vitreous.

Two weeks previously patient received a

blow on her eye from a horse's hoof.

Therapeutics.—Extr. jabor. fluid., to begin with forty drops, and to increase the dose to sixty if perspiration should not be profuse.

After forty drops, secretion of saliva was very slight, and perspiration hardly perceptible. After twenty drops more, ptyalism was very profuse, but perspiration very slight. Patient raised the dose to eighty drops, whereupon perspiration became only moderate. There was slight rumbling in the head, tinnitus in the ears, and some pressure in the forehead and the temples. Perspiration lasted about an hour, secretion of saliva about an hour and a half. One hundred drops, which I ordered henceforth for each dose, produced profuse perspiration.

After patient having used jaborandi fourteen times, hemorrhage in vitreous was totally resorbed, leaving only some very fine opacities. The background of the eye admitted of examination. There was flat detachment of retina in its inferior part, and a broad apoplexy, running from upwards and inwards to downwards and outwards, around the optic disk, partly covering the latter. Vision, counts fingers at 2'. Patient withdraws from

further treatment.

Case V.-M. C., barber's wife, 27 years old. suffering from irregularity of menstruation and fluor albus, came under my treatment November 12, 1878, with serous irido-choroiditis and posterior synechiæ of both eyes. V. R.  $\frac{20}{70}$ . Jaeg. 12. V. L.  $\frac{20}{50}$ . Jaeg. 9. Fine opacities of vitreous. No syphilitic history.

On mercurial treatment the morbid process subsided; synechiæ were torn and vision of both eyes was restored to  $\frac{20}{40}$  and to Jaeg. 2. The opacities of vitreous remained un-

To favor resorption I put patient seven times under the influence of jaborandi, fifty drops of which brought about profuse perspiration. The unpleasant after-symptoms were very violent; intense glimmering and spectral appearances before both eyes, headache, vomiting, and pain in abdomen and genitals, and, from the third day, gastric catarrh.

The treatment resulted in perfect resorption of the opacities of vitreous. Vision became  $\frac{20}{20}$  of the left and  $\frac{20}{30}$  of the right eye. Jaeg.

I could be read with either eye.

Case VI.—B. F., butcher's daughter, 17 years old, came under my treatment September 7, 1878. Patient, a robust-looking girl, states that for two days she has been suffering from intermittent, alternating dilatation of her pupils, which lasts only for a short time, then entirely subsides, to reappear after a short free interval, now on the right, now on the left Both pupils are never dilated at the same time.

Patient becomes aware of the dilatation by the glimmering which appears before the respective eye. She states that she has always been healthy, that she has never suffered from headache or nervousness, and that no excitement or nervous shock had preceded. She began to menstruate at sixteen; menstrual function has been irregular, and had stopped in the spring of 1878. From this time, at regular periods of three weeks, she suffers from flushing of the face, slight pain in the region of the womb and the spine, which is followed and relieved by bleeding from the

Supposing that I had to deal here with a reflex irritation of the womb, caused by the irregularity of menstruation, I advised patient to use jaborandi the day the first symptoms of her suppressed period were felt. To that effect I ordered forty drops, with the permission of twenty more.

Patient followed my advice.

After having taken for three days fifty drops of extract of jaborandi, which was very well borne and caused profuse perspiration, menstruation reappeared, lasting five days. catamenial periods have become since then regular. Mydriasis disappeared entirely.

Case VII.—B. E., barkeeper, 33 years old, had enjoyed good vision until five years ago, when his sight began to fail. He had been treated for four years in different dispensaries with high doses of mercury and jodide of potassium. In the last year the power of vision decreased to that degree that he had to give

up his business.

He acknowledges that he had suffered from syphilis two years previous to the beginning of his eye-trouble, that he had been much addicted to liquor, and had two attacks of delirium tremens. But he states that during the past two years he has led a very sober

Examination, made February 13, 1870.

shows

Right Eye.—Counts fingers at 15'. Reads without glasses Jaeg. 10; with +10 Jaeg. 8.

Left Eye.—Counts fingers at 18'. Reads without glasses Jaeg. 7; with +10 Jaeg. 5. Central scotomata of both eyes. Field of

vision of both eyes is limited upwards and inwards. The line of limitation is lower in the right eye.

Both pupils react on reflex action very promptly; but consensually the left pupil reacts somewhat slowly, the right one hardly at all. The dilatation of the pupils and in-

traocular pressure are normal.

The ophthalmoscope shows both papillæ flat, pale, veins hyperæmic, arteries very thin. The smallest arterial branches of the papillæ obliterated. Hyperæmia of veins and con-

traction of arteries on the retina.

I put patient under the influence of fluid extract of jaborandi, beginning with forty drops. But I had to raise the dose to eighty in order to obtain the desired effect. Perspiration generally kept on for an hour, ptyalism for an hour and a half. There were no unfavorable after-symptoms during the whole course of the treatment.

The result was:

1. After the eighth dose: R. E.  $-V = \frac{15}{200}$ . Jaeg. Jaeg. 8 without glasses; Jaeg. 6 with +10.

L.  $E - V = \frac{20}{200}$ . Jaeg. 5 without glasses;

Jaeg. 4 with +10.

2. After the sixteenth dose:  $R. E.-V = \frac{20}{100}$ . Jaeg. 5 without glasses; Jaeg. 3 with +10.  $L. E. -V = \frac{20}{70}$ .

Jaeg. 4 without glasses;

Jaeg. 2 with +10.

Reaction of pupils, consensual as well as on reflex action, perfectly normal. Field of vision improved. Fundus oculi unchanged.

Jack Tundus octain and anged.

3. After the twenty-third dose:
Vision of each eye <sup>2</sup>/<sub>2</sub>. Each eye reads without glasses Jaeg. 3 fluently, and Jaeg. 2 with some trouble, with +10, Jaeg. 1.
Field of vision only very little limited up-

wards and inwards. Central scotoma entirely

subsided.

Both papillæ present a reddish tint, arteries are more filled, veins are normal. On the inner part of each optic disk there are to be seen two small arterial branches, which had not been observed before.

(To be continued.)

CLINICAL NOTES ON APHONIA OF THIRTEEN MONTHS' STANDING -CURE AFTER FIFTY DAYS OF TREATMENT.

SERVICE OF PROF. J. E. GARRETSON, M.D., Surgeon to the clinic established by the Philadelphia Dental College for the instruction of its students in diseases of the mouth, jaws, throat, face, and associate parts.

Reported by M. H. CRYER, M.D.

DATIENT, Mrs. B., age 32, blonde, delicate; married for thirteen years; mother of a child now 10 years old; history, one of ordinarily good health; residence, a valley situation adjoining West Point, New York.

February 1, 1878, an attack of intermittent fever prostrated the lady, confining her to bed

for a period of three weeks. For this fever she was treated by the family physician. At the end of this time, being able to move about the house, she was one day subjected to sudden alarm by a threatened danger to her little girl, who was playing in the garden. Quickly throwing up the closed sash of a window behind which she was standing, and attempting to call out, she found the only voice at her command to be the merest whisper. dysphonia thus inaugurated, conjoined with the general weakness about her at the time, continued without change for six months.

At the end of these six months, finding herself on an occasion laboring under a constipation which had continued for five days, application was made to a neighboring druggist for a purgative, which was responded to by sending four pills ordered to be taken at one dose. These pills, the character of which is unknown (evidently, however, intelligently and judiciously prepared, the compounder being a physician), instead of acting upon the bowels, are credited by the lady with being the cause of a diffused anasarca which came on next day, the swelling extending from head to hips, the inferior extremities remaining, however, natural in appearance, but so deranged nervously as to make necessary the use of a cane, which support had to be employed as an assistant in locomotion for over eight weeks. With the appearance of the anasarca the ability to whisper disappeared; loss of voice was complete; the lady was compelled to depend entirely on her pencil as a means of communication.

Three months later, the aphonia and weakness persisting, the patient came to Philadelphia with a view to consultation and treatment, Her condition, as recognized at the first visit,

was as follows:

The neck rigid to a degree that prevented either flexion or rotation of the head; the sterno-cleido-mastoid muscles were like bars of iron; no effort could elicit the slightest attempt at phonation; hyperæsthesia existed extensively above the shoulders, the region of the mastoid processes being especially painful; the mouth was dry, a desire for

acids being almost continuous; the tongue was so fixed that to draw it forward produced almost unbearable pain; at the moment of release it would fly back with the rebound of a freed spring; movement of the lower jaw (which movement was permitted only to a limited extent) yielded a crackling sound, to be heard freely at the distance of a foot: pressing the larvnx from side to side resulted in a plainly-felt crepitus. Larvngeal examination, save by auscultation, was, of course, impossible.

Condition of Lungs .- Marked deficiency in vesicular murmurs over the entire organs; bronchial râles persistent and characteristic; hepatization of apices of upper lobes.

Heart.—Singularly regular in all physical

movements; pulse 68.

Temperature.—Variable; complaint made by patient of being over-cold in daytime and over-hot at night; great susceptibility to at-

mospheric changes.

Uterus.—Organ in position; patient unconscious, in feeling, of its existence; menses, however, in abeyance; have appeared but five times since the original malarial attack. Patient persists in maintaining the meaning of this irregularity to lie in "change of life, and seems incapable of being influenced to accept a more rational explanation.

Liver.—Torpid; passively congested.

Diagnosis.—"The aphonia, the hyperæsthesia, and the local derangement existing in parts innervated by the spinal accessory, the glosso-pharyngeal, and the pneumogastric nerves, point to the presence of a source of irritation associated with the common eighth pair. The irritant is a semi-plastic effusion. That this inference is a correct one must be held demonstrated by a relation of cause with effect. In this case motion, sensation, and function are alike deranged; motion, sensation, and function of the locality are alike under control of the eighth pair. It is to be accepted that the cure of the case lies in the removal of that which acts as the irritant.

"I. The patient is recognized as laboring under a malarial influence; exacerbescence is marked. Commencing treatment with this indication, we order the following combina-

" R Ferri pulveris, 3i; Quiniæ sulphatis, gr. vi; Ãcidi arseniosi, gr. i; Extracti nucis vomicæ, gr. iv; Bismuthi subnitratis, gr. xii.—M.

To be put into a goblet of water. Dose, a teaspoonful each two hours; to be stirred

well at the repetition of each dose.

"A medicine, better perhaps in the majority of cases of chronic malarial poisoning than that just named, is prepared by taking one ounce of the ordinary red Peruvian ground bark and combining it with half an ounce of Virginia snake-root; these are put into one

and a half pints of water and placed over a slow fire until the infusion simmers down to a pint; this, when cold, is strained and mixed with one pint of Lisbon wine. The dose is a wineglassful, to be taken when sitting down

"In naming the combinations suggested, periodicity is far from being the only thing considered; periodicity is far from being the only thing necessary to consider. has indications for tonic written all over it,all over it and under it. The prescription made is thrown to windward as a kind of

sheet-anchor: it will hold. I think.

"2. The liver of the patient is doing its work, but indifferently. To meet an indication here existing, podophyllin may be used; five grains will be made up into ten pills, one to be taken each night on going to bed, until all are gone. After this, it will be well to continue the impression, for at least a month, by the use of daily doses of the Ofner Rakoczy Bitter Water.

"3. The local troubles being accepted as expressive of enervation dependent in turn on the presence of local effusion, means are to be employed to stimulate the absorbent system. To this end the negative of the electrodes will be placed, for fifteen minutes each day, at the foramen magnum; the positive, employed by means of sponge saturated with alcohol, will be manipulated over the front and sides of the neck. As an adjuvant, the whole neck will be rubbed nightly, on retiring, with iodized oil.

"4. An indication lies in the deficient menses. No advantage is to be gotten here, however, the patient positively refusing to admit of interference with what she believes

to be a natural condition.'

Result of Treatment.—First week, trifling gain in movement of the neck; slight decrease in tenderness.

9th day.—Ability to make the sound of the letter c; the whisper inaudible, however, except to an ear placed very near the mouth.

12th day.—Articulates c and h so as to be

heard at a distance of several feet.

13th day.—Great increase in mobility of neck; hyperæsthesia disappearing; whispers

16th day.—Whispers sentences without effort; can protrude the tongue slightly.

During the succeeding twenty days the patient gained but little in the way of voice, but very much in the way of general health and in mobility of neck; not enough, however, in the latter direction, to admit of the employment of a throat-mirror, Dr. Garretson failing in several attempts at laryngoscopy. Change was made at this time in the manner of applying the electric impression: heretofore the application had been purely with the design of stimulating the absorbents. Successive shocks were now carried directly through the larynx, attempt being made to produce the

greatest impression possible on the muscles of the chordæ vocales. The result of this

change was almost nil.

On the 13th day of March two dry cups were used, one being placed on the chest, just below right clavicle, the other on the left side of the neck, in the space between the trapezius and sterno-cleido-mastoid muscles. As a result of these cups, the patient found herself able to speak a short sentence aloud. This ability disappeared instantly with the removal of the cups.

On the 14th the cups were reapplied, and while on the lady read two pages of book-

matter.

15th.—Cupping repeated; patient read aloud, almost continuously, for two hours.
16th.—Cups again used. Patient read con-

16th.—Cups again used. Patient read continuously, and with a fair degree of ease: attempt to engage in conversation resulted in immediate loss of voice.

17th.—Cups reapplied. Patient sang stanza from a hymn; still unable to converse aloud. 22d.—On the morning of this day, while at

her temporary residence in the city, voice

suddenly came.

25th.—The voice continues to gain steadily in volume; patient esteems that she has never spoken with greater freedom or naturalness. Attempted again, but failed, in a laryngoscopic examination. The iodine and oil ordered to be replaced by unguentum hydrargyri. Tongue is protruded without pain; mobility increasing.

27th.—Voice is maintained perfectly; conversation is indefinitely continued, without

any indication of failure.

29th.—Patient left the city for her home. The cessation of exacerbescence; the daily increasing mobility of the neck; the growing health,—these, taken in connection with the full restoration of voice and its persistence, imply that the cure is to be accepted as being complete.

A feature of interest in the case to the specialist lies in the condition of the lungs as exposed at time of original examination. Hepatization continues at date of dismissal of patient, while the aphonia is entirely cured. The solidified apices evidently had nothing to do with the lack of power in the recurrent

laryngeal nerves.

#### UTERINE INVERSION.

BY W. L. NEWELL, M.D.

O'N the 23d of February last I was invited by Dr. J. Howard Willetts, of Port Elizabeth, some six miles south of this city, to see a lady who had given him a great deal of anxiety. From him I gathered the following from his note-book:

"Mrs. C. H., a strong, healthy woman, aged

26 years, confined 12.30 A.M., June 5, 1878. Child well and strong; weight about eight pounds. The labor was tedious, and the pains of ordinary strength and force. Placenta extracted easily and naturally; easy and quick getting up; about her room on the eighth day. Some time after, her mind became somewhat disordered, showing a disposition to talk much more than usual, and in a rambling style, partly incoherently. This passed off during a fortnight, and did not again occur. I attributed it to nervous de-rangement. I do not know when she first complained of hemorrhage, but I find I was called to see her about August 24, and occasionally after that; September 1, 19, and 25; not at all in October; again November 19, December 14, 16, and 22, I remember she had some hemorrhage, and I thought it men-orrhagic, and treated her for it until about January 10, when I made an examination by touch, and discovered what I supposed was a polypus, and, after perhaps a week, I made a speculum examination, and thought it a fibrous tumor. I watched the same, and treated her until along in February, when I sent for you," etc.

This was the statement of her physician, and upon being presented to the patient her appearance indicated that she had been a terrible sufferer for months; in short, she seemed in danger of imminent death. Upon examination by touch, I discovered a tumor, as large as and shaped like an egg, occupying the axis of the pelvis. It seemed so much like a partially expelled dead ovum, that I was strongly tempted to remove it with my two fingers at once; but, passing the index finger around the mass, searching for a point beyond which it should have gone had it been a tumor, or a polypus, or a dead ovum, no such point existed. I then introduced my Goodell speculum, and the mass fell between the blades, extending nearly to the os externum. After dilating the speculum to its utmost capacity, no difficulty was experienced in deciding that no passage existed towards the abdomen, beyond the mass. The mass (now lying loosely between the wideopen blades of the instrument) was very vascular in appearance; in fact, was constantly bleeding. With absorbent cotton I wiped it off, and the bleeding reappeared as by exosmosis. Upon consultation, I expressed my judgment that the case was one of inversio

uteri, and of nine months' standing.
"Well, now, my young friend," says Prof.
Charles D. Meigs, in his letters to his class,
"you have made your diagnosis: what are
you to do for your patient? Will you reposit
or reinstate this womb? You can't. The
time has gone by. You have no art or skill
nor any power equal to the performance of
such a miracle of surgery as that." But our
dear old Professor (God bless his memory!)
wrote twenty years ago, when gynæcology

was in its infancy. Since then we have learned that the non-gravid uterus will bear as rough handling almost as a sow's ear, and

manifest no rebellious symptoms.

But to our patient. She was very weak. and to leave her to nature alone was to invite death at no distant day. We decided to use, locally, a weak solution of plumb, acet, thrice a day, and as frequently one or two grains of the lead internally, together with fifteen drops of fl. ext. ergot (Squibb's), to be continued for one week, and then, if her condition warranted, we would make an effort to reinstate the womb. So, on the 2d of March, accompanied by Drs. H. C. Smith and Willetts, we repaired, with many misgivings, to our patient, where everything seemed in as favorable a condition as we had reason to expect. As an anæsthetic I preferred sulph, ether, in consequence of the previous bleeding and consequent prostration. After dilating the vagina sufficiently to introduce the whole hand, I began to put back the parts which came down last, by dilating the vaginal neck with the first and second fingers, aided by a stick of dogwood, which I devised for the purpose. The stick was eight inches long, each end terminating in a head one inch in diameter, one end slightly concave, the other slightly rounded, while between the two heads the stick was one-quarter of an inch in diameter. With the concave head of my stick resting on the side of the vagina for a fulcrum, the other side rested against the inverted neck of the uterus, and thus, by to-and-fro motion of the stick in the left hand, guided by the fingers of the right, around and round in every direction, until the parts yielded as in rapid dilatation of the neck of the uterus by the dilator while in situ. After one hour and twenty-five minutes of persevering effort, scarcely recognizing that any progress had been made, I had the satisfaction of feeling the body engage, as it were, in its own neck. I then reversed my stick, and carried the (well-oiled) rounded end straight to the fundus, which clung to it like the finger of a glove, and slightly disputed its willingness for the retraction of my little friend the dogwood

The lady was then released from the ether, a large ball pessary introduced, followed by a flat one, both of which were retained for three days, when they were both removed, and I introduced a half-inch bougie again to the fundus. The ball pessary was again introduced and retained for a week, and then removed and a weak solution of potass. chlorat. injected twice daily. The ergot was continued for a few days, when what seemed to be uterine contractions supervened, and all treatment

was discontinued.

Dr. Willetts's note-book, now quoted, says, "She is still getting along well, and without a single symptom of an untoward character since the operation."

The cause of inversion is a perplexing one. I do not believe that it is easy to bring it about by traction on the placental cord, otherwise it would be more frequent.

What physician has not placed the hand on the abdomen, over the uterus, after its contents were emptied, in order to induce contractions, and found the womb indented or flattened on one side or the other, and where the placenta may have lain? Would not that indicate inertia of the muscular fibres of the inner surface, while the outer fibres kept up their incessant squeezingdown of the indented point, until it was entirely overcome and finally yielded to inversion?

MILLVILLE, N.I.

#### TRANSLATIONS.

PNEUMOTHORAX FROM RUPTURE OF THE HEALTHY LUNG AS A RESULT OF A FALL. —A. Senfft (Cbl. f. Med., 1879, No. 5; from Deutsche Zeitschr. f. Prakt. Med.) gives the case of a sailmaker who fell some distance, lighting upon his back. He was seen two hours later, when he was found with difficult breathing, cyanosis, etc., the signs of a left pneumothorax. The left side of the thorax was decidedly enlarged; cardiac dulness disappeared, being only present over a space of three fingerbreadths on the right side of the sternum. There was no fracture of the ribs, nor was there any localized pain, the emphysema appearing to be dependent entirely upon a rupture of the lung. Fever, etc., occurred during the following days, with severe pain throughout the left side of the chest, cough, and sputa tinged with blood. The existence of pneumonia of the lower lobe of the left lung, with dry pleurisy, was ascer-The patient made a good recov-Senfft says he knows no case in literature of exactly the same sort, but refers to Traube and others.

Menstrual Exanthemata — Urtica-RIA FOLLOWING THE APPLICATION OF LEECHES TO THE CERVIX UTERI.—J. Schramm (Cbl. f. Med., 1879, p. 83; from Berlin. Klin. Wochens.) gives two cases of eruption accompanying the menstrual period. In the first, an unmarried woman of 36, suffering with uterine colic, discrete brownish-red, lentil-sized papillæ appeared on the backs of the hands, lasting about eight days. After some time, similar lesions began to show themselves on other parts, as the genitalia, neck, and occasionally back of the ear, coinciding with the menses in their appearance. General treatment, with special attention to the dysmenorrhæic condition, cured this and the eruption simultaneously. In the second case small red papules, arranged in rows and giving rise to severe burning and itching, showed themselves on the back and shoulders at the beginning of the menstrual period, disappearing without leaving a trace at the end of three days. In addition to the above cases, Schramm mentions that of a woman (whose skin, however, was so sensitive that a gnat-sting would excite urticaria) who suffered from an eruption of coin-sized, red quaddels of urticaria coming out in four successive nights on the back and thighs, accompanied by severe burning and itching, and which was the result of two leeches applied to the neck of the inflamed and enlarged uterus.

CASE OF PRIMARY CARCINOMA OF THE PANCREAS.—A. Strümpel (Deutsch. Archiv f. Klin. Med.; Cbl. f. Med., 1879, p. 93) gives the case of a man of 25 who had been sick for four weeks with trouble in the stomach. For three weeks constant prominence of the abdomen, frequent pain in abdomen and loins, general debility and loss of appetite. Stools regular. When examined, the patient appeared cachectic, with left pleuritic effusion, decided ascites, red and infiltrated umbilicus. Later, frequent vomiting of blood and constipation, with a feeling of resistance, on palpation, below the border of the thorax on the right side. The appearance of the umbilicus seemed at first to point to peritonitis; later it seemed likely that primary cancer of the stomach, with secondary involvement of the peritoneum, was present. Post-mortem examination, however, showed cylinder-celled cancer of the pancreas, with metastasis into the peritoneum, liver, heart, and mesenteric glands. Numerous minute hemorrhages into the stomach. Hemorrhagic catarrh of a marked character in the mucous membrane of the small intestine. In addition, the small intestine was variously distorted and stenosed by the new growth.

DIFFERENTIAL DIAGNOSIS BETWEEN SYPHILITIC PNEUMONIA AND PHTHISIS.—Syphilitic pneumonia may give a history of infection. The constitution of the patient

is robust. The objective signs of pulmonary induration, dulness, diminution of the respiratory murmur, more pronounced depression above and below the clavicles, short respiration, dyspnæa, and pain in the chest, all point to syphilitic pneumonia. The absence of cough, expectoration, and crepitant râles, and of fever, together with the evident effect of iodic and mercurial treatment, are also in favor of syphilitic pneumonia. This affection seems to yield to comparatively small doses of mercury.—Le Mouvement Méd., 1879, No. 9; from Berlin. Klin. Wochens.

VISIBLE PULSATION OF THE BRACHIAL ARTERY: A CONTRIBUTION TO THE SYMP-TOMATOLOGY OF SOME AFFECTIONS OF THE CIRCULATORY APPARATUS.—Bettelheim (Cbl. f. Med., 1879, p. 93; from Deutsches Archiv f. Klin Med.) asserts that inspection of the brachial artery in its course in the internal bicipital sulcus, and particularly in its lower part, before it enters the elbow, may be a useful diagnostic aid. In healthy persons the artery only pulsates here (1) when the individual uses the muscles of the arm much, as blacksmiths; or (2) in a few cases of very thin These circumstances excluded, visible pulsation of the brachial artery only occurs (a) in insufficience of the aortic valves, (b) in the arterial stiffness and stenosis of old age, or (c) in hypertrophy of the left ventricle. The pulsation is not noticeable in simple palpitation of the heart unaccompanied by hypertrophy.

TREATMENT OF URTICARIA BY ATROPIA.

—Frankel recommends the internal use of atropia in the severer and more stubborn forms of urticaria. He has succeeded with this remedy in three cases where all else had failed. It does not prevent relapse.

DEFORMITY OF THE ORBITAL ARCHES AS A SIGN OF EPILEPSY.—Dr. Méricamp calls attention to a peculiar thickening of the periosteum of the orbital arches in epileptics, which he considers pathognomonic of this affection. It arises in those who have been epileptic from childhood, and is caused by the frequent contusions to which these parts are subject in falling. The bruising, frequently repeated, gives occasion to periostitis, and this, at the age when bone is rapidly forming, produces very marked enlargement at these points. Méricamp suggests the possible medicolegal significance of this condition.-La France Méd., 1879, No. 19.

# PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, APRIL 26, 1879.

#### EDITORIAL.

TRICKS THAT ARE VAIN.

A MONG the noisy reformers of our day is a small clique who appear to believe that, in the matter of insane hospitals and of the treatment of the insane. the times are sadly out of joint, and that it is their mission to set them right. step in the reforming process which they all take is to abuse the Association of the Superintendents of North American Hospitals for the Insane, having heard, probably, of the advice once given by a veteran member of the bar to one just entering the profession. "In addressing a jury," he said, "if you have no case, then abuse your opponent." A case in point we have just observed in the April number of the Penn Monthly, in an article on government supervision of the insane. For the purpose of making the abovenamed association odious, the writer quotes what he describes as a resolution adopted by it on one occasion, reading thus: "The Board of Trustees should be composed of individuals possessing the public confidence, distinguished for liberality, intelligence, and active benevolence; above all, political influence." We quote it precisely as he gives it,—the very words, punctuation, and italics,—and certainly it is not very creditable to the association, as it looks. "Mark," as the prince says to Falstaff, "how plain a tale shall put you down." Four years ago, the association directed its secretary to collect all the resolutions ever adopted by it, and have them printed in pamphlet form. Turning to this authentic, and, we believe, only printed, copy of the resolutions, we find the one in question, reading thus;

"The Board of Trustees should not exceed twelve in number, and be composed of individuals possessing the public confidence, distinguished for liberality, intelligence, above all political influence, and able and willing faithfully to attend to the duties of their station." It was one of a series of propositions "on the organization of hospitals for the insane," adopted in 1853; that immediately preceding it reading thus,—"The general controlling power should be vested in a board of trustees or managers; if of a State institution. selected in such a manner as will be likely. most effectually, to protect it from all influences connected with political measures or political changes." On another occasion, the following was adopted: "Resolved, that any attempt, in any part of this country, to select such officers [superintendents] through political bias, be deprecated by this association as a dangerous departure from that sound rule which should govern every appointing power, of seeking the best men irrespective of every other consideration." Comment is unnecessary. The Penn Monthly must be proud of its contributor who rejoices in the name of Van de Warker and lives in Syracusė, New York.

WE feel called upon to notice an editorial upon the "Conservatism of Philadelphia Medicine," printed in the Louisville Medical News of March 29. In the first place, eminent as Dr. Alfred Stillé is, he is not Philadelphia, and a tirade against the profession of this city, because the learned professor has not tried the salicylic-acid treatment of rheumatism, is ridiculous. Probably nine-tenths of the active profession of this city to-day rely upon salicylic acid and its salts in the disease alluded to.

Again, it is uncertain whether Dr. Stillé ever said what is attributed to him. Lectures, we know, have been reported from

this city in various medical journals, in which the lecturers have been seriously misrepresented. We know that skeleton notes have been worked up at home by means of text-books, the lecturer being made to say what, in the opinion of the reporter, he ought to have said, whether he had said it or not; and we know also that, at least in some cases, the views of the lecturer have been greatly distorted. It seems hard to say these things, and yet it is high time that they were said. know no reason for believing that the cases especially referred to are isolated. prolificness of some of these reporters is gigantic, and there is being rapidly built up in American journals a whole clinical literature for which the best men of the profession in the country are seemingly responsible, but which is full of inaccuracies, absurd theories, etc., which have their origin not in their apparent source, but in the ignorance and audacity of medical reporters.

# LEADING ARTICLES.

DR. GEORGE B. WOOD.

THE late Dr. George B. Woo'd was a member of a Quaker family whose history dates back to the earliest colonial times; James Wood, who first emigrated from England to Philadelphia, having been born in Bristol in 1671. Two of his sons married very early, and settled at Stow Creek, near Greenwich, Cumberland County, New Jersey, one of them upon a property which was, some years ago, acquired by Dr. Wood, by purchase, from a descendant of its original possessor.

Until after the birth of the subject of this sketch, which took place in 1797, the family was prominent in South Jersey, but the whole generation to which Dr. Wood belonged finally moved to Philadelphia.

Whilst still a lad, Dr. Wood was sent, by his father, to school in New York City, where he remained several years, subsequently finishing his education in the University of Pennsylvania, taking his A.M. in 1815. After graduating A.M. he

kept up his classical studies, forming in this way an intimacy with the late Rev. Dr. Muhlenberg, which lasted until the death of the latter. During the period of Dr. Wood's medical-student life, the two friends read together Virgil's Bucolics, Georgics, and Æneid, the works of Horace, Ovid's Metamorphoses, the Satires of Juvenal and Persius, the Greek Testament, Grotius de Veritatæ Religionis Christianæ, Lucretius, Dialogues of Lucian, etc., etc.

March 24, 1818, Dr. Wood was examined for his degree of medicine, and was told by Dr. Chapman that his thesis "was one of the best practical disputations he had ever read," and was recommended by Dr. James to publish it. This, we believe, was never done. The thesis was on dyspepsia, and has been presented, with other medical manuscripts, to the Lewis branch of the Library of the Philadelphia College

of Physicians.

Even before his graduation, Dr. Wood had a distinct intimation from Dr. Parrish, whose favorite student at that time he was, that if he would settle in Philadelphia he (Dr. Parrish) would assist him in practice. Directly after graduation Dr. Wood became associated with the medical charities of the city, and, owing to the assistance of Dr. Parrish, began to acquire practice almost at once; so that from May, 1818, to January, 1819, he received fees amounting to four hundred and fifty dollars.

About this time the doctor began to relax in his studious habits to some extent, and, until his marriage, went "much into

gay society."

At the period of which we are speaking, Dr. Parrish had long been the favorite medical practitioner of Philadelphia, and was almost as popular as a medical teacher. It was as instructor to Dr. Parrish's students that Dr. Wood began, in 1820, his career as a lecturer. The lectures were upon chemistry, and were given three times a week.

The same year he read his first medical paper before the Medical Society of this city. "A very interesting debate," we are told in his extant diary, "ensued, and compliments were not spared."

After an engagement of five months, Dr. Wood was married, April 2, 1823, to Caroline, the daughter of Peter Hahn. Miss Hahn not being a Friend, this marriage resulted in the disownment of the doctor by that society.

Dr. Wood's first professorial position was received in the summer of 1822, when he was elected to the chair of Chemistry in the College of Pharmacy. The first course yielded him two hundred dollars, bringing, with all fees derived from other sources, his professional income up to fifteen hundred dollars a year; but in subsequent years the annual receipts from the professorship fell to one hundred dollars.

Notwithstanding his professorial duties, the rising young physician continued assiduous in private medical teaching, and in 1827 he was lecturing, in the summer, upon Materia Medica to Dr. Parrish's students, and in 1830 he formally joined Dr. Parrish in the Philadelphia Association for

Medical Instruction.

December, 1827, was a marked month in the doctor's life, from his having then suffered his first attack of gout. Before this, and during his whole subsequent life, the doctor was annoved almost daily by pains and various nervous disturbances, which he attributed to the gouty diathesis, but the only attack of frank gout he ever suffered was that just alluded to. In 1828 he began to write for popular periodicals, and also became active in the temperance society of the city. He soon ceased, however, to write for the lay public; nor did popular lecturing long claim his attention. A favorite anecdote with him of his early life was, that after his only popular lecture he came out, unperceived in the darkness, and overheard a gentleman say, "The doctor sat down rather abruptly this evening," and receive from the lady on his arm the response, "He did not sit down a moment too soon,"which side-play determined the doctor never to attempt the like again.

In 1831, Dr. Wood was transferred from the chair of Chemistry in the College of Physicians to that of Materia Medica in the same institution. This position he continued to occupy until 1835, when, after a somewhat severe canvass, he was elected Professor of Materia Medica in the University of Pennsylvania, an institution in which the year before he had been asked to fill the position of Provost. The changes in the character of the teachings which he made in his chair are stated, by those who witnessed them, to have been very

great.

Supported by the abundant means (about two hundred thousand dollars) which he

had acquired from his father-in-law, Dr. Wood was able to maintain a considerable botanical garden, and thus to illustrate his lectures freely with living plants. By these, aided by abundant drawings, specimens of crude and prepared drugs, etc., the dry didacticisms of his predecessor were converted into direct object teaching.

In his old age the doctor not infrequently spoke with much amusement of the scenes which occurred at the close of the lecture on lozenges, when there was a scramble for a share of the two or three pounds of palatable sweets he had left for

the delectation of studious palates.

In similar manner, directly after his transfer to the chair of Theory and Practice of Medicine, in 1850, he made a trip to London and Paris, for the purpose of purchasing pathological specimens, models, drawings, etc., whereby to illustrate the subject of his lectures. In after-life, he often stated that he believed his lectures at the University had yielded him little or no revenue, he having spent, upon his gardens and the various illustrations and collections, about as much money as he had received from student fees. According to the statements of his journal, his Museum of Theory and Practice cost him ten thousand dollars.

As a teacher Dr. Wood was, as in all other things, precise, formal (but sufficiently enthusiastic), clear, logical, and very decided and positive in his opinions. He was a very cultivated scholar, maintaining his acquaintance, even late in life. with the original classics; reading and conversing, more or less fluently, in French, German, Italian, and Spanish. His diction was consequently elegant, and his elocution was almost perfect. scarcely passion enough in his nature to rise to the highest eloquence, but his descriptive powers were very good, his hospital experience a very wide one, and his flow of words always abundant.

On the whole, we suppose it not too much to claim that he was, in two branches of medical science, the most accomplished teacher of his generation upon this continent, and was surpassed by very few, if

any, in Europe.

As an author Dr. Wood was very prolific, much more so than even his most intimate friends were aware of. He appears to have been one of the few men who loved writing for writing's sake.

Besides his published works, he has left behind him many hundreds of pages of manuscript upon various subjects. Journals of his numerous journeys in this country and in Europe; essays upon medical and other subjects; a long novel; poetical translations from foreign languages; original poems; these make up the relics of the amusements of his leisure Under the title of "The First and Last," he published a considerable epic poem. This book was anonymous, and was printed in England, though published by J. B. Lippincott & Co., of this The work did not succeed in attracting attention, and the secret of its authorship has been well kept, Dr. Wood desiring that it only should be made known after he had passed away.

The professional writings of Dr. Wood have been very numerous and laborious. There are in print two volumes of memoirs, essays, and addresses, besides various contributions to medical journals and his three great works. The first of these in the date of publication, and the only one whose active life survives that of its chief author, is the United States Dispensatory. The history of this book is peculiar, and is bound up with that of the Pharmacopœia. Some years since, in our columns, the history of our national standard was considered in detail. Those who read this will remember that, in or about the year 1830, two Pharmacopæias appeared as claimants for national favor. Of these, the one published in New York was so imperfect that it died from a single stroke given it by Dr. Wood in a very severe and caustic review.

To establish the other Pharmacopæia in popular favor, the Dispensatory was conceived and executed by Drs. Wood and Bache, aided by Daniel B. Smith, at that time the best-known pharmacist of the Its immediate and continuous success is known to all the world. springs of its unparalleled career are not hard to understand. They are to be found in its accuracy, completeness, thoroughness, and especially in the possession by its authors of that most rare mental character, namely, the power of seeing into the heart of the subject, and of clearly portraying, in as few words as possible, the essential points of the matter in hand. Probably never were two men better fitted to work in unison than were Drs. Wood and Bache; but the merit of the original conception of the book, as well as the greater part of the realization of the plan, rests with the former.

The practical experience which enabled Dr. Wood to produce and maintain so successfully a work on The Practice of Medicine was chiefly gained in the wards of the Pennsylvania Hospital during twenty-four years of service, or from October 26, 1835, until his resignation, in 1859. The book itself was written in 1846 and 1847, much of it "in the night, between the hours of ten and four o'clock," the first volume appearing in January, 1847, and the second in June of the same year. It was everywhere received with the greatest favor, and has passed through six editions, embracing thirty-six thousand copies. For a long time its only important rival was the lectures of Professor Watson. Even, however, in Great Britain there were not wanting many (the Medical Times and Gazette amongst them) who asserted the superiority of the American book. It was adopted as a text-book in the University of Edinburgh and, we believe, also in some of the various medical schools of Dublin and London. its therapeusis and pathology are now antiquated, its portrayal of disease and analysis of symptoms still remain among the best in the language.

The Treatise on Therapeutics and Pharmacology was first published in 1856, and passed through three editions, the latest in 1868. It is much more flowingly written than either of the other of the author's great works, condensation of style being

no longer the chief object.

Dr. Wood, although for many years he did considerable business, was never to any extent absorbed in practice. According to his own statement, he never, even during his student life, witnessed the complete process of parturition. It is related that the nearest he ever came to seeing a child born was when he was hastily summoned, in the night, to a fashionable boarding-school, to see one of the pupils who was said to be suffering from a colic. Placing his hand upon the abdomen during a paroxysm, the true condition of affairs flashed on him, when, saying to the anxious principal, "Send for Dr. Hodge," he turned upon his heel and fled. Forty years ago, specialism found even less favor in Philadelphia than it does now, and it was no doubt largely owing to his aversion to

obstetrics that Dr. Wood never was more active as a family physician. When he first entered upon his career, his ambitions were surgical, and his old journal contains an account of an operation for hare-lip which he successfully performed. however, soon gave up this branch of the profession, because he found that he could not control the natural tremulousness of his hand.

In 1860 Dr. Wood resigned his Professorship in the University of Pennsylvania, and abandoned active professional life. The next two years were spent with his wife in Europe. His return home was hastened by the growing illness of his wife, who finally succumbed to malignant

As Trustee of the University, and as President of the College of Physicians, the subject of our sketch maintained his interest in and connection with the medical profession until the last. It is somewhat remarkable that in the discussions which resulted in the recent changes in the medical course of the University of Pennsylvania, although nearly fourscore years of age, he was always upon the side of reform and progress, the natural conservatism of age seemingly having no effect upon his eagerness for the best. The necessity for the possession of a hospital by the University was fully recognized by him many years since, a will made about 1852 so disposing of his property as to induce the erection of such an edifice.

For the last five years, Dr. Wood had been steadily growing more feeble, until he was unable to leave his room, and scarcely able to leave his bed. Not impatient, but desirous of death, because he felt himself a burden in the world,—useless for any purpose,-he waited with the most complete Christian trust the inevitable result. His death was finally chiefly due to suspension of the functions of the kidneys, and was preceded for a day or two by constantly increasing stupor.

# CORRESPONDENCE.

REMINISCENCES OF DR. GEORGE B. WOOD.

MR. EDITOR,—You ask me to write some reminiscences of the lets Dr. C some reminiscences of the late Dr. G. B. Wood. It is not so easy to do this in a satisfactory way, for his life was apparently one of such systematic smoothness that it leaves but few salient points of recollection to seize upon. I well remember my first call upon him to enter as one of his private students. It seemed as though I had chosen a strictly formal, machine-moving man for my preceptor, one in whom it would be forever impossible to find any variableness or shadow

Through three years these same impressions were kept up. There was a large private class, and although we were personally met by the doctor from two to three times weekly throughout the year, except in midsummer. I doubt whether there was one of us who felt much better acquainted with him at the end of his time than he was at the beginning of it. But we were splendidly taught. The lessons were set and had to be learned. Precisely at the appointed time for recitation the doctor entered the room, and, instead of a "good-afternoon" or "good-evening, gentlemen," he would shake hands with every one in turn in a solemn and stiff manner, which struck awe into the beginners. Then, taking his seat, the questions were put in a calm and precise way, and were generally answered correctly. Explanations of difficulties were made, and to the advanced student who would venture where there might be some latitude of answer, a sharp and rather irrita-ble "Did I teach you that?" would bring him back to soundings. There was no fun in any of those examinations; it was all work. Dull fellows, of course, were with us from time to time, but they either brightened up or dropped out. If there was anything to laugh at, we merely smiled and looked at each other while in the room, and had it out afterwards. Besides meeting us himself so often, the doctor sent us to all of the private and practical courses that were worth having, especially during the spring and summer months. We were indeed put through the same kind of education that is now so earnestly striven after on a large scale in the University.

The doctor certainly spent most of the fees that he got from us on us, and if any estimate were made of his own time and services he was pecuniarily largely the loser; but he certainly took great pride in having a good class of private students. Those were the days of students' parties. Each professor would give one or more of them during the winter, and the large classes were apportioned so that no one should be forgotten. Dr. Wood observed a regular system in this matter also. Instead of crowding his rooms, he preferred to have several entertainments during the session. These were precisely alike in style and in the order of their rotation. We of the private class knew how they would be made up, for some would be mostly student and others mostly doctor. The entertainment, under the leadership of the famous colored caterer, old John Irwin, who, by the way, looked like an upright terrapin, was first-class in character, and, like everything else, had a definite order of procedure. Tea, coffee, and cake were handed in the early part of the evening, and later on supper was served. Two or three of us private students were generally asked to assist, so as to make the others feel at home; and sometimes we had hard work of it, especially with the gawks. There was no lack of wine, but I cannot remember any instances of excess, nor even of great hilarity, and this is what I know cannot be said of some of the parties at other professors' houses. On these occasions I was never able to decide whether the doctor really enjoyed food, or whether he merely ate in the course of nature. I certainly never heard him discuss eating and drinking with any great degree of interest, and am inclined to think he looked upon them as physiological necessities. Whatever may have been his own ideas on these points, they did not affect his liberality in providing for others. His Wistar parties, to which I was invited after student days were over, were grand affairs, and the table, under the control of Irwin, was rich in all good things. I now recall the fact of the host becoming quite enthusiastic over some famous red wines of his own purchase while in Europe. He seemed. however, to take more delight in having them for his friends than for his own enjoyment.

I was a student during the latter years of Dr. Wood's occupancy of the chair of Materia Medica. His lectures in this branch were truly superb. They were most pro-fusely illustrated with the very finest speci-mens that could be obtained. Every species of medicinal plant that could be grown in this climate and in his conservatories was shown in the living state for the benefit of the class. Some of the fall preliminary lectures were made gorgeous with the foliage of the tropics. The strictest attention was paid to the pro-

fessor by the huge classes.

A syllabus, furnished gratuitously and generally interleaved for notes, was in the hands of each student. The doctor would become enthusiastic over certain subjects. Among these were opium, mercury, quinia, iron, the nitrate of silver, but above all others turpentine. Turpentine in typhoid fever, and how and when to use it, was a great point with Dr. Wood. He dwelt on it so much that it of course became a subject of satire and caricature with the students. "Hodge on Irritable Uterus" and "Wood on Turpentine" were illustrated with both pen and pencil. The doctor, I think, would have been greatly irritated had he known of this in those days; but in after-life, when his rigidity had somewhat release the students of t what relaxed, he actually laughed on hearing a funny song in chorus to the tune of Crambambuli, setting forth the virtues of turpen-

tine. The doctor was one of the visiting physicians to the Pennsylvania Hospital, where he gave clinical lectures to large classes. He took great interest in his cases, and was as punctual and systematic in his visits as in everything else. Every case was thoroughly investigated, and those for the clinic were most carefully selected the day before they were to be lectured upon. After graduating, I became resident physician in this hospital, where my opportunities during the doctor's term of service were highly treasured. He was uniformly kind and considerate, but maintained his unbending dignity always. I have known of queer things said to him by queer patients; he may have smiled, the rest of us laughed, but not then and there.

After leaving the hospital I became an assistant of Dr. Wood's at the University, where he then filled the chair of Practice. him on every one of his lecture-days during the session. Of course I became much better acquainted with him, in fact learned to know him well. He was as strict as ever in his ideas of duty, but as to deportment he would occasionally relax, and if there were a few minutes to spare after everything was ready for the lecture he would indulge in familiar conversation, and even stand a joke with compla-

He was as profuse and liberal in the illustration of his new professorial chair as in the old one. If a painting, drawing, model, pathological preparation, or any apparatus was needed, it was had, either from home or abroad. I said I thought he spent all he got from private students on them; I verily be-lieve he must have spent nearly all that he got from his chair of Practice in illustrating it. He surprised me, I remember, by telling me that he was a pioneer among teachers both of this country and Europe in making branches demonstrative which theretofore had been almost universally didactic. Dr. Wood resigned the chair of Practice and gave up public teaching in 1860. He went to Europe in that year, and before his departure the profession gave him a grand dinner in the foyer of the Academy of Music. It was a great success. I think my friend Dr. Littell, who has been appointed to write a memoir for the College of Physicians, wrote for us a touching song to the tune of Auld Lang Syne on that memorable occasion. To him I leave the task of telling of the great works of the doctor's life,-how, as scholar, author, and teacher, he filled all places with a completeness that left nothing undone. He will also tell us of his marvellous industry, of his faithfulness to every obligation, of his kindness to the sick, and of his unbounded liberality. His great desire was to advance the attainment of all useful knowledge, and in doing his part so well his life is an example WM. HUNT. for mankind.

# PROCEEDINGS OF SOCIETIES.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

A<sup>N</sup> adjourned conversational meeting was held at the Hall of the Society, Philadelphia, February 19, 1879, President Henry H. Smith, M.D., in the chair.

H. Smith, M.D., in the chair.

The object of the meeting was announced

to be

THE DISCUSSION OF THE EXTENT AND CHARACTERISTICS OF THE PREVAILING FORM OF PNEUMONIA.

The President, in opening the discussion, referred to a case that he had mentioned at the close of the last meeting. He called attention to the fact that, owing to some unexplained cause, cases of acute lung disorder and deaths from pneumonia had multiplied to an extraordinary degree. In a recent weekly report of the mortality of this city he had noticed that one-eighth of the whole number of deaths occurring in the city of Philadelphia were from inflammation of the lungs, and the proportion would be still greater if we exclude the still-births and deaths from infantile diseases. The large mortality may be due to the fact that there is an epidemic, and it may also be that many have erroneous ideas of treatment. He pointed out that venesection in some cases is not a depressing agent, but is actually a cardiac stimulant.

He reported a case that had come under his observation. A lady of middle age, who had been in good health, apparently, except a slight dyspeptic disturbance, was taken ill while at home, on Friday, February 21, 1879. After a slight ordinary exposure, she felt rather poorly, and decided upon staying in bed. She also had some pain in the left side of her chest. On the next day, February 22, she sent for Dr. H. H. Smith, who found that she had a severe pain like that of pleurisy, with some fever; no cough, no expectoration, but the lower part of left lung was consolidated. There had been no assignable cause, except ordinary exposure in going about the house. She was ordered quinine and Dover's powder, and appeared to do very well for several days. The temperature varied from  $90\frac{1}{2}^{\circ}$  to  $101^{\circ}$ , but never went above  $101\frac{1}{2}^{\circ}$ , which was on the third or fourth day. The pulse did not exceed 116, and a favorable termination was expected.

On the fourth day jaundice came on. She had some expectoration now, which was tinged with yellow, looking like orange-juice. Respiration became more free, and air began to enter the lung, which had previously been solidified.

On the eighth day, just one week after the pain appeared in the left lung, she was seized with pleuro-pneumonia of the right lung, and on the following day, just seven days after sending for him, she died.

This case was evidently one of blood-poisoning, the depression and pulmonary compli-

cation being due to the influence of the poison upon the nervous centres, and affecting the circulation through the par vagum. The expectoration became like that of purpura hæmorrhagica rather than that of croupous pneumonia. He had been aided in this case by Dr. Da Costa. He knew of another case where, in forty-eight hours, the pneumonia had extended to the other lung, and the patient died exactly under similar circumstances.

The subject of pneumonia, especially this peculiar form, is very important, particularly in considering the value of different forms of treatment. He does not believe that the cases do as well under the present plan as they formerly did, when bleeding was more generally practised and its value better understood.

Prominent citizens have died after a brief illness, although attended by the highest skill and surrounded by every comfort and hygienic precaution. Among these we can count a prominent medical professor, a distinguished judge, and an eloquent and public-spirited editor, who was an ornament to our municipal government. The soldier, who escaped the dangers of Gettysburg and saved Philadelphia from pillage, died a victim to an uncured pneumonia,-an affection of which a prominent physician of an adjacent county said, it "is a disease which should not in a healthy person, even of great age, be fatal." "So often have these announcements been made, that the public now believe that the medical profession has no means to successfully combat it." This disease may therefore be justly termed an opprobrium medicorum; and this charge is, I think, maintained by the exhibit of our bills of mortality, for which I am in-debted to the courtesy of Mr. Chambers, the Registrar of the Health Office. The mortality is certainly alarming in this city, but the epidemic has also extended to other cities.

Dr. W. R. Bullock, of Wilmington, Delaware, under date of February 17, 1879, writes as follows:

DR. HENRY H. SMITH:

DEAR DOCTOR,—I regret that the short interval before the meeting of your Society prevents my furnishing as satisfactory a statement as I would like. I give, however, the result of the examination of the record at the office of registration of deaths for the months of November and December, 1878, and for January and February to the 17th instant.

Nov., 1878. Deaths from Pneum Dec., """ "" Jan., 1879. "" (Typhoid)"		a, 1 4	From all	causes	59 63 <b>7</b> 9
Feb. rto 15, 1879. " " (Catarrhal)" " " " " (Typhoid)" " " " (Pleuro) "	7	10	66	** ;	34
Total since November, 1878 Total since January 1, 1870	-	11 26			

Mortality from Pneumonia . 47 Total mortality 235

The proportion, therefore, of deaths from pneumonia, for January and February, as shown by the report, is large. The report includes the deaths at the *Almshouse*.

The reply to the other questions I shall have to give as the result of my own experience and that of several of our most busy physicians whom I have been able to question on the subject. The impression thus derived is somewhat at variance with the Although all have had cases of pneumonia, they were not so numerous as to give the impression that the disease was epidemic or particularly fatal. It was rarely of a "typhoid" type, and was quite uncommon in connection with typhoid fever. One case only was reported to me as complicated with None regarded it as zymotic pericarditis. or infectious, or as inexplicable by the varying temperature, etc., of the season. Nothing special as regards the treatment. and stimulants were generally employed.

We have had an epidemic of a kind of influenza, not exactly like the typical "grippe," but accompanied at the outset with high fever and lung-symptoms that made one feel apprehensive of impending pneumonia, but resulting only in moderate bronchial inflam-

mation.

Until within the past two or three weeks, we have had much more than the average proportion of typhoid fever, rarely, however, as above stated, complicated by pneumonia.

Very truly yours,

W. R. Bullock.

In order to regulate the discussion of this important question, and obtain definite information from the extended experience of those before me, I have written out a series of interrogatories, answers to which will certainly tend to show our professional opinions and experience on this subject.

i. Is the present disease croupous pneumonia? I answer yes, in my opinion, subject

to further evidence.

2. Is pulmonary disorder the primary lesion and cause of the fever, or only a symptom and local expression of a specific disease? I say the condition of the lung is secondary, and not the cause of the fever; it is a symptom of a pre-existing disease, and the hepatization and pulmonary cedema are evidences of the continued action of the cause that first

induced the pulmonary disturbance.

3. What is this cause at present? This is difficult to decide; but I think it is not entirely due to cold, but is something special. When we recall the symptoms, as faucial irritation, anorexia, constipation, icterus, meteorism, disordered urine, in addition to pectoral symptoms, I would suggest a partial paralysis or weakened function of the pneumogastric and sympathetic nerves, the respiratory, cardiac, and faucial muscles being influenced by similar disturbance from anastomosis with the phrenic, glosso-pharyngeal,

and spinal accessory, thus inducing cyanosis and imperfect elaboration of carbonic acid gas, and excrementitious products of respiration and digestion; in short, "nervous disturbance and insomnia."

4. Is the disease a zymotic or infectious one? Yes; perhaps due to infusoria and the parasite called by Drs. Salisbury and Cutter the "Asthmatos ciliaris," and by Dr. Leidy regarded as "incomplete or deformed ciliated

epithelial cells."
5. What is the cause of death? Insufficiency or weakness of the heart's action, with loss of respiratory power, from pleuritic pain and inability of lung to expand.

The primary indication of treatment is to sustain the heart and action of respiratory muscles until expectoration frees the lung.

How accomplish this? Strange as it may sound to some of you, I assert my faith in venesection, as the best, most prompt, and certain means of emptying the coronary and other veins, thus relieving the right side of the heart, and enabling the right ventricle to send its blood through the lungs, and thus filling and stimulating the left ventricle, from which, at the base of the aorta, close to its valves, arise the coronary arteries that nourish the heart and sustain its power. Having done this, I would resort to quinine as a nerve-tonic (perhaps it may also kill infusoria), and give brandy and milk, or beef-tea. A little digitalis might be useful. Formerly pneumonia was not so fatal, and until I see some record from our hospitals of the present results of bleeding, I shall regard this mortality as probably due to the extent of the influence of the therapeutics of the German practitioners upon our medical men. Basle, Kiel, Tübingen, Vienna, are entirely different from any of our towns, and the regimen suited to their patients cannot be blindly adopted elsewhere with good results. cold baths I have no experience, but know that the advocates of them recognize their danger in cases of threatened lung-complica-The observation of men like Wood, Hartshorne, Parrish, and others, led them to favor judicious venesection in pneumonia; and this disease was at that time less fatal than at present.

Dr. Robert Bolling, of Chestnut Hill, reported that he had noticed, during the last four months, that pneumonia was somewhat more prevalent than it had been at any time during the last seventeen years, but it did not show any decided peculiarities in his practice. During the last few weeks, typhoid symptoms were more decided in the cases under his observation. The disease is not severe among

children.

Dr. Edwin R. Girvin also had not seen much difference in the character of the disease, except that the sputum is thinner, and not the ordinary brick-dust.

Dr. William Pepper, in opening the discus-

sion, presented tables showing the mortality from the principal thoracic diseases during the last seventeen years. These proved that the mortality from pneumonia, during this season, was not in excess, in proportion to the population, of that during several other years, with the exception of the present month of February. One cause of the prevailing belief in the unusual prevalence and fatality of pneumonia is undoubtedly the undue importance attached to the death of prominent citizens. Such individuals are usually advanced in life, and heavily burdened with cares and responsibilities; they frequently persist in their work after the appearance of slight early symptoms of sickness, and then are apt to pass rapidly into a state of typhoid exhaustion. Moreover, in many such instances the pulmonary trouble is secondary to organic disease of some other viscus, and the cause of death might be attributed more correctly to the latter than to the pneumonia, which is only the final symptom in a long train of morbid processes.

Still, the fact remains that there is now an unusual amount of pneumonia, which is undoubtedly dependent upon the wide-spread epidemic of influenza prevailing. This is confirmed by the character of the pneumonia, which is the *catarrhal* form rather than the *croupous*. I think this would be found to be the case in a remarkable degree, if the distinction between these two forms of pneumonia were as carefully observed as it should be.

Catarrhal pneumonia is much the more fatal form, and in particular is much more likely to assume a typhoid character. It is the form which most frequently occurs in the course of specific diseases, as typhoid fever, influenza, and the like, and in feeble, debilitated subjects. It is more likely to attack both lungs, and to invade successive portions of the lungs. It is more frequently associated with severe catarrhal inflammation of other epithelial surfaces, as of the stomach and bowels, bile-ducts, or renal tubules.

It is not necessary to dwell at this time on the marked diagnostic points between the two forms.

The question as to whether pneumonia is a local inflammation or a zymotic disease has been much discussed lately. The statistics that have been adduced to show that it is not influenced in its frequency, distribution, etc., as other inflammatory thoracic diseases are, are not sufficient to prove this position, since no clear distinction has been made between the croupous and catarrhal forms, and since, as we are now ourselves experiencing, catarrhal pneumonia frequently occurs in connection with wide-spread outbreaks of zymotic diseases. Apart from its association with such affections, no one would raise the question of the zymotic nature of catarrhal pneumonia. But in regard to the croupous form, the question must be regarded as still sub judice. My

own opinion is decidedly against its zymotic character. My experience would lead me to conclude that, in regard to its causes, its relations to climatic conditions, its independence of the local conditions favorable to zymotic disease, its sporadic occurrence, the absence of contagious or infectious characters, the relation between the local disease and the general symptoms, the influence of treatment, the unilateral position of the lesion in most cases, and so in regard to many other particulars, croupous pneumonia should continue to be classed among local inflammatory diseases.

So, too, it is impossible to discuss fully the treatment of the various forms of pneumonia

at present.

I am glad that the President has referred to the value of venesection in pneumonia. I agree with him, to this extent at least. If a patient is seen early, before hepatization has occurred, and while, although the central part of the affected area is probably so seriously damaged that fully developed inflammation will there occur, there is a zone surrounding this where the vessels are merely extremely congested, and where, if a prompt relief of this engorgement can be effected, proliferation and diapedesis (i.e., inflammatory exudation) may be prevented. Now, at this stage I feel sure that prompt venesection will favor such a good result, and thus may possibly abort or, at all events, limit the extent of the inflam-matory process. This same effect may be secured in a less degree, but with more safety, in cases where any doubt exists as to the propriety of general venesection, by leeching or wet cupping; but later, when the local disease is fully developed, venesection seems to me of doubtful propriety. The only advantage to be hoped for would be the relief of a laboring and over-loaded right heart, and this relief would necessarily be transient, since the mechanical cause would remain. It seems, therefore, that in most cases, after full development of hepatization, failure of the right heart from over-loading may be treated more successfully by other means than venesection.

In the early stage (congestive) I would allude to the importance of full doses of quinine, and of the cautious use of aconite or . veratrum viride, as tending to limit the area and amount of exudation. At this time, also, it seems highly important that special attention should be given to the state of other organs. Frequently there exists catarrhal inflammation or congestion of the gastro-hepatic mucous membrane. This will interfere seriously with both medication and alimentation, and should receive immediate treatment. cannot doubt but that harm is often done by the speedy administration of stimulants and irritating remedies while the above condition exists. It seems proper, in such cases, to give very carefully selected and light food; repeated small doses of calomel and soda or bismuth, or a dose of blue mass followed by

a mild laxative; and to give full doses of quinine by the rectum, thus avoiding all irritation of the stomach. The close relations existing between the lungs, the heart, and the liver and stomach, and the great extent to which the result of the case will eventually depend on the patient's power of assimilating food, should warn us of the primary importance of paying careful attention to the digestive organs. These considerations apply to all stages of the disease. After consolidation has occurred, the indications are to reduce pyrexia; to relieve nervous irritation and secure sleep; to support strength, and especially the power of the heart; and to hasten the softening of the exudation. In brief, I may say that these points seem to me to be best secured by the continued use of full doses of quinine (given by the mouth or rectum, or both); by the cautious use of opium; by digitalis; by carbonate or muriate of ammonia; by concentrated nourishment; and, if necessary, by stimulants. A word may be added in regard to a few of these points. The amount and mode of administration of quinine for the purpose of reducing pyrexia have been much discussed. My own practice has been to give twenty-four grains or less in the course of twenty-four hours, in divided doses. In rare cases only have I found it necessary to give larger amounts, and I have never resorted to such colossal doses as recommended by some recent German authorities. In this connection, I may add that the external use of cold water, as so strongly recommended by the same writers, appears to me rarely necessary, and not free from serious objections. It is certainly altogether opposed to our experience here, to say that, in every case where the temperature rises to 104°, or even to 105°, cold affusions or bathing should be employed. In my judgment, these remedies should be used only in very exceptional conditions in pneumonia.

I have never seen any disadvantage result from the careful use of deodorized tincture of opium, or of some other suitable preparation, in cases where there was sleeplessness. I have also frequently employed, especially where nervous symptoms of ataxic typhoid type are present, assafœtida, by enema or suppository, or valerian, musk, or camphor. If violent side-pain exists, morphia, given hypodermically near the spot, will afford the

most speedy relief.

Much might be said in regard to the use of alcohol in the treatment of pneumonia. It certainly should not be used as a regular and invariable part of a routine treatment, but should be employed to meet certain well-recognized indications that call for its administration. Many cases do well, if not better, throughout their whole course without any alcohol; many others require a moderate amount of it; finally, some absolutely demand its free and unsparing use.

I may close with an allusion to local appli-After hepatization is developed, it may still be desirable, from time to time, to apply dry cups, if signs of engorgement of the surrounding lung-tissue appear. Blisters. of pretty full size, applied during the second stage, appear to me of considerable value. If it seem undesirable to employ a blister, the daily application of iodine over a large surface of the chest should be used. It has become much the custom, of late years, to apply large jacket-poultices over the chest in pneumonia. There are, however, several objections to them that have led me to abandon their use, and to substitute a layer of raw wool or cotton stitched inside the merino or flannel shirt. This can be kept in position for several days, and does not interfere with any other local application to the chest; it is light, and yet maintains moisture and uniform warmth of surface.

Dr. Hutchinson, having been called upon by the President, said that he had recently had but one case of pneumonia under his care at the Pennsylvania Hospital. The patient was a man of forty, who had been sick three days before admission into the wards. When first seen, he was excessively exhausted by having been brought from Darby, six miles below the city. The resident physician very properly gave him stimulus at once, and prescribed for him a grain of quinine, half a grain of digitalis, with five grains of nitrate of potassium, every three hours. Next day, the same treatment was continued, with the addition of a poultice to the right side of the chest, the seat of the pneumonia. He was also ordered five ounces of whisky during the day, and to have beef-tea and milk freely. His temperature, shortly after his admission, was 105°, his pulse 140, and his respiration 40. His symptoms indicating increased debility, the nitrate of potassium was replaced, on the third day, by ammonia, and four ounces of wine were given him, in addition to the whisky. About the fifth day convalescence began, and he is now, about two weeks and a half after the beginning of his attack, entirely restored to health. Dr. Hutchinson said, also, that a very similar case, occurring in his private practice, had been treated in very much the same way, and had also terminated in recovery. He stated that at least three other cases, all occurring in men somewhat advanced in life, had been treated in the wards of the hospital during the last two months in a very similar manner by one of his colleagues, and had also all ended favorably.

In regard to blood-letting, Dr. Hutchinson said it was not his own practice, and he believed not that of the other members of the medical staff of the Pennsylvania Hospital, to bleed freely in pneumonia. Occasionally a little blood might be taken by means of cut cups, but even this was not frequently done.

Dry cups were, on the other hand, often resorted to, and he thought generally with good effect. In one case, which was under his care some years ago, the patient was bled from the arms by the resident physician, Dr. George S. Gerhard, because the right heart seemed to be paralyzed from over-distention. This condition was relieved by the venesection, and the patient finally made a good recovery.

Dr. J. A. McFerran advocated a supporting treatment in pneumonia, and was opposed to bleeding. He endorsed the general plan for the disease that is laid down in the article on pneumonia in Ziemssen's Cyclopædia.

Dr. F. P. Henry had noticed a change in type in certain fevers, of late, as well as in pneumonia, and thought this would explain the different results from treatment. It was formerly considered a mild disease, requiring hardly any treatment beyond good nursing.

Dr. J. L. Ludlow, being present as an in-

Dr. J. L. Ludlow, being present as an invited visitor, was asked to state his opinion upon the subject. He coincided almost entirely with the views expressed by Dr. Pepper. He believed that many practitioners now actively at work are really not competent to diagnose the complaint.

In the treatment of pneumonia he always valued the lancet, and believed that it is required to-day as much as it was in the past. He opposed anodynes, as opiates lock up the secretions and check cough, and it is necessary to get rid of the débris by expectoration. Complications, gastric or intestinal, must be attended to. He used blisters and poultices, and the disease, in his hands, had not often proved fatal.

Dr. G. Hamilton does not generally bleed, but when a feeble pulse indicates extreme pulmonary congestion it is necessary.

Dr. O'Hara did not consider pneumonia epidemic, although all thoracic inflammations were at present increased in number and severity. Plastic pleurisy has been specially prevalent and difficult to treat, in consequence of atmospheric conditions now existing. One case of pleurisy showed a depressed condition after recovery, owing, he thought, to the use of veratrum viride during the attack, a condition not heretofore seen, and probably owing to some atmospheric peculiarity.

A case of croupous pneumonia, now recovering, had returned from his work well on Saturday, was down on Sunday, exceedingly depressed, looking more like a corpse than a living man; paralyzed as to respiratory and cardiac action. Here was a case for bleeding, according to the President's idea of a cardiac tonic; but, thinking the heart should be assisted, he gave digitalis and ammonium carbonicum every two hours, with copious dry cupping. He was satisfied this treatment is often indicated, though he would bleed to remove mechanical obstruction to the right heart.

He asked Dr. Pepper's opinion as to hem-

orrhagic sputa, a fatal symptom according to Hartshorne, but to him apparently favorable.

Dr. Pepper coincided in this opinion.
Dr. R. A. Cleemann expressed his lack of confidence in the statistics, which he regarded as not always reliable. Pneumonia does not appear to him to be more prevalent now than in 1860. He does not have so much fear of bleeding as some, and instanced the occurrence, after operations, of secondary hemorrhage, which rarely does any harm, in military surgery.

#### PATHOLOGICAL SOCIETY OF PHILADEL-PHIA.

THURSDAY EVENING, FEBRUARY 13, 1879.
THE PRESIDENT, DR. H. LENOX HODGE, in the chair.

Intra-thoracic tumor secondary to an osteosarcoma of the right thigh. Presented by Dr. Louis Starr.

THIS specimen was obtained after death from the same patient from whom Dr. John Ashhurst, Jr., removed an osteo-sarcoma of the right femur by a hip-joint amputation on February 28, 1877. The latter specimen was presented to the Society by Dr. Ashhurst on March 8, 1877.\* The following is the medical history of the case, taken from the ward notes of Dr. D. J. M. Miller, resident physician:

John --, æt. 24 years, a carpet-weaver, of temperate habits, was admitted to the medical ward of the Episcopal Hospital on December 11, 1878. All of his immediate family were living and in good health, except one brother, who was suffering with a chronic affection of the lungs. He had never had syphilis. His general health had been good before the appearance of the tumor above the right knee early in 1876, and after the amputation, until about the 15th of Octo-ber, 1878. At this date he began to fail in flesh and strength, had pain in the upper part of the right chest, an irritating cough with mucous expectoration, and slight hectic fever. His weight before the onset of these symptoms was 140 pounds. On admission he weighed 128 pounds. He complained of weakness, and of palpitation of the heart and dyspnœa on exertion. There was considerable pallor of the surface. His tongue was lightly coated, he had little appetite, there were frequent eructations of flatus, and he was annoyed with cardialgia, and occasionally ex-perienced difficulty in swallowing, the food appearing to meet with obstruction before it reached the stomach. There was no regurgitation of food or vomiting, and the bowels were regular. The abdomen was moderately distended, and was tympanitic on percussion. The lower margin of the right lobe of the liver

<sup>\*</sup> Transactions of Path. Soc. of Phila., vol. vii. page 11.

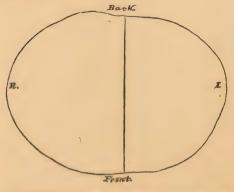
extended, in the mammary line, about two inches below the costal border, the left lobe was also displaced downward; the portion of the liver accessible to palpation felt perfectly smooth and normal. There was some cough and a scanty mucous expectoration; the cough was most troublesome when lying on the back. An examination of the chest disclosed the following conditions:

Centre of the lower part of the sternum half an inch to the left of the median line.

Right side.—Slight retraction of the inframammary region; intercostal spaces effaced, but not bulging; a little less expansion on deep inspiration than on opposite side; semi-circumference on the level of sixth rib, anteriorly, nineteen inches. Percussion tympanitic in first intercostal space anteriorly, and above the spine of the scapula posteriorly, entire flatness and want of elasticity over the remainder of the lung. Feeble respiratory murmur under clavicle, distant tubular respiration in upper part of axillary region, and marked tubular respiration along the vertebral gutter, loudest near the apex, and disappearing at the seventh rib; breath-sounds inaudible over the rest of the lung. Faint friction-sounds at the base posteriorly; very loud friction-sounds, accompanying both respiratory acts, over the whole of the lateral and anterior surfaces, attended near the base of the chest, anterolaterally, by very rasping friction fremitus, the latter perceptible to the patient. Vocal fremitus absent over the area of flatness, and vocal resonance reedy.

Left side.—Semi-circumference at sixth rib eighteen inches. Apex-beat of heart in fifth interspace two inches to the left of the nipple; no cardiac murmur. Some dulness on percussion over the lower portion of the lung in front, attributed to the left lobe of the liver. The difference in the shape of the two sides of the chest is shown by the accompanying cyrtometric tracing, taken on the level of the

sixth rib, anteriorly.



The pulse counted 92 beats per minute, and was moderately strong. Sleep was disturbed by the cough. The urine was voided freely, was acid in reaction, had a sp. gr. of 1.028, and

contained no abnormal ingredients. There was no change in his symptoms until December 26, when he had an attack of vomiting, followed, on the 27th, by diarrhæa. He left the hospital on December 28. After this the prostration, emaciation, cough, and dyspnæa steadily increased, and death occurred on January 30, 1879, being preceded for an hour and a half by severe orthopnæa.

The post-mortem examination was made on February 2, in the presence of Dr. S. F. Hazlehurst, and of Dr. J. H. Grove, who had charge of the patient after he left the hospital. The body was much emaciated. Upon removing the sternum and costal cartilages the right side of the chest was found to be filled by a tumor. This extended from the apex of the chest to a plane on a level with the tenth rib laterally; its left edge was situated one inch beyond the left margin of the sternum, and when the hand was passed along the left side, a deep groove was felt which accommodated the right side of the heart and ascending aorta; behind this groove, towards the lower part of the tumor, there was a spherical nodule, as large as an ordinary orange, extending over the vertebral column. The heart was displaced to the left. The diaphragm and liver were forced downward. The whole of the liver was visible below the costal border, and there was a deep depression on the superior surface of the right lobe corresponding to the convex base of the The œsophagus occupied a position behind the spherical nodule, and it was probably pressure from this that had occasioned the obstruction in swallowing. tumor was removed with difficulty, as it was necessary to tear away the costal pleura, and as the diaphragm was adherent to its base, and the pericardium to its left side. It weighed ten pounds and a quarter, was nodular, firm in texture, and conical in shape; on making an incision the scalpel grated against numerous small calcareous nodules, and the surfaces of the cut were somewhat rough, and white in color. Several large calcareous masses were found in the growth, the largest, three inches in length by an inch in thickness, being situated posteriorly near the left The costal pleura was adherent to the tumor, but could be stripped away by using a little care and force, leaving a roughened surface. The right lung was situated at the upper posterior part of the tumor, and was very much compressed, measuring half an inch in thickness, six inches in length, and four in breadth; the pulmonary tissue was soggy and scarcely recognizable; the right bronchus and pulmonary vessels were still patulous. The anterior surface of the compressed lung, and the new growth, seemed to be intimately connected. There was a shallow sac containing about two fluidounces of clear, serous fluid behind the lung, formed by the pulmonary and costal pleuræ; the interior of this sac was covered with shreds of lymph. Several small calcareous nodules were found in the lung. The left lung was collapsed, the lower lobe was congested, and contained, near its upper portion, two calcareous nodules as large as filberts; there was no other alteration. The heart was healthy. The mesenteric glands were somewhat enlarged, the liver and kidneys were congested, and the spleen about twice its usual size; otherwise the abdominal viscera were normal.

A microscopic examination of the tumor was made by Dr. Simes, who reports as follows:

"From thin sections, taken from different parts of the new formation occupying the right thoracic cavity, and examined microscopically, the following elements and ar-

rangement were seen:

"The greater part of the various sections consisted of large nucleated spindle-shaped cells, arranged in such a manner as to form alveolar spaces in which were large, round cells. In some places were seen alveolar spaces limited by a fibrillar connective-tissue wall; within these spaces, and partially filling them, were found large distinctly epithelioid cells, and granular débris. Here and there, in some of the sections, were observed large oval or irregular-shaped cells, apparently encapsulated, and surrounded by a hyaline or slightly granular substance. Other points showed a distinctly granular fundamental substance, in which were seen small imperfect lacunar spaces, with radiating canaliculi.

"From this examination I would consider the new formation to be a spindle-cell sarcoma developed in the lung, as shown by the remains of the alveoli, in which there has been a proliferation of the endothelial lining (catarrhal pneumonia). The examination would also indicate a cartilaginous, calcareous, and perhaps osseous transformation in

some portions of the neoplasm.

"At the request of Dr. S. W. Gross, I made a microscopical examination of the primary tumor of the thigh, removed twenty-three months previous to the patient's death by Dr. John Ashhurst, Jr. The section examined was obtained by cutting open the tumor and removing a piece from the centre of the growth. It presented the characters of a spindle-cell sarcoma, with ossifying points,—that is, consisting of large nucleated spindle-shaped cells, round cells, and points of imperfectly developed osseous tissue."

Dr. S. W. Gross said, the specimen which had just been presented was of special interest to him, as he saw the patient from whom it was removed several months before his limb was amputated by Dr. Ashhurst, when, from the situation, consistence, and mode of growth of the primary tumor and the age of the patient, he diagnosed it as a periosteal spindle-celled sarcoma. From the minute examina-

tion made by Dr. Simes, however, it appears to belong to the variety of sarcomas termed osteoid, and that it was really of that nature is proved by the fact that the huge metastatic growth of the lung contained ossific plates. The case is, moreover, of great value in confirming a statement, which was based upon a critical study of sarcomas of peripheral origin. and was made by him a few weeks since in a course of lectures on morbid growths, delivered in the upper hall, to the effect that the periosteal sarcomas of the long bones, whether composed purely of spindle cells or of round cells, or of either of these elements combined with calcification or ossification of the intercellular substance, are more malignant by nearly fifty per cent. than are the sarcomas which start from the medulla. Of the spindlecelled tumors, all terminate, sooner or later, by metastasis, and in one-half of all instances there are likewise local recurrences; of the round-celled, sixty-six per cent, die in the same way, while sixteen per cent. live with recurrence, and sixteen per cent. survive for forty months, apparently free from disease: while of the osteoid variety, sixty-eight per cent. succumb from visceral growths, with local recurrence in nearly one-half, eight per cent. die of repeated recurrences, and twentyfour per cent. live for a period which varies from several weeks to twenty years, or for fifty-eight months on an average. Of the entire number,—that is, of forty-four cases,—six ran a natural course, and on death metastatic tumors were found in four; eight survived operation, but one had a recurrent growth; one was fatal from septicæmia six days after operation, but there were no visceral complications; while twenty-seven died from metastasis, and two from local recurrence of the disease. Hence malignity, as denoted by local returns and general dissemination of the disease, is not within seventy-seven per cent. of the periosteal sarcomas.

Dr. John Ashhurst, Jr., said that he could add but little to the very full clinical history given by Dr. Starr. Dr. Ashhurst had, however, seen the patient at various intervals between the dates of the operation and of the beginning of his last illness, and was thus enabled to fix the time at which the symptoms of an intrathoracic growth were first manifested, as having been not more than three, or at most four, months before death. The convalescence after the operation had been rapid and complete, and there was at no time any recurrence of disease in the stump. The duration of life had been twenty-three months after the amputation, and thirty-seven months from the first development of the primary

umor.

Dr. S. W. Gross said, in regard to the metastasis of ossifying tumors, that he thought these growths reproduce themselves, because the juices taken up contained the calcareous salts, and it seemed probable to him that they were absorbed while the tumor was developing, and carried to the lung, where they remained

dormant for a time.

Dr. Ashhurst said that there were mechanical difficulties in the way of applying Dr. Gross's theory of the propagation of tumors by the absorption of bone-salts, in a state of solution, to a case such as that before the Society. It was easy to understand that a more or less minute fragment of a primary growth might be broken off and carried by the circulation to another part by the process of embolism, and several cases were on record in which this occurrence had been observed; but if centres of disease were to be carried in a state of solution through the blood-vessels, it would be natural to expect that multiple growths would result, and not a single tumor, or tumors confined to a single locality. In fact, while we could in many cases trace the propagation of morbid growths through the lymphatic system (as in carcinoma), and in some few instances through an embolic process, Dr. Ashhurst thought that there was still a large proportion of cases in which, though the occurrence of secondary growths was obvious, yet the mechanism of their formation must continue to remain in obscurity. In the present case, if the intrathoracic tumor was the result of any mechanical infection from the primary growth, it must have originated before the date of opera-tion, and then have remained absolutely latent for more than a year and a half, since the original tumor was entirely removed, and there had been no recurrence whatever in the stump or in its vicinity.

(To be continued.)

# REVIEWS AND BOOK NOTICES.

Atlas of Skin Diseases. By Louis A. Duhring, M.D., Professor of Skin Diseases in the Hospital of the University of Pennsylvania, etc. Part V. Scabies, Herpes Zoster, Tinea Sycosis, Eczema (Vesiculosum). Philadelphia, J. B. Lippincott & Co.

It is not too much to say of this part of Dr. Duhring's great work that it is the best which has yet appeared. As representations of skin disease, and apart from their general artistic excellence, which is high, these plates are simply unexcelled. Scabies is represented by a fairly typical case. The little curved canaliculi characteristic of the affection, as well as the secondary irritative lesions, are well displayed, and this plate should be very useful in aiding the puzzled practitioner to arrive at a diagnosis in those not infrequent cases where eczema is likely to be mistaken for scabies, and vice versa. The plate of herpes zoster is beautiful as a work of art, and as perfect as the limits of color and material

will permit,—in this instance almost absolutely perfect. The representation of tinea sycosis should be carefully studied in connection with the picture of non-parasitic sycosis in Part II. No one who examines these plates together, and compares their essential characteristics, need afterwards hesitate between the diagnosis of "eczema of the beard" and true "barber's itch" in any well-marked case. The plate of eczema vesiculosum adds one more representation of this protean affection, and, taken in connection with the plates of E. erythematosum, E. squamosum, and E. rubrum, already given, forms a "clinical lecture" in itself. The letter-press continues to preserve its high standard as a clear-cut and vivid pen-portrait of the various forms of disease depicted in the plates.

ATLAS OF HISTOLOGY. By E. KLEIN, M.D., F.R.S., Lecturer on Histology at St. Bartholomew's Medical School, and E. NOBLE SMITH, L.R.C.P., M.R.C.S., Late Senior House Surgeon to St. Mary's Hospital. Philadelphia, J. B. Lippincott & Co. London, Smith, Elder & Co.

The pictorial history of medicine is being abundantly attended to in these later days. Of all the subjects at hand, none lends itself better to the pen or paint-brush of the artist than does that of histology, and we welcome

the present venture most heartily.

The name of Klein is sufficient guarantee for its accuracy and authority, whilst the illustrations drawn by Dr. Smith are really very fine. Of how many fasciculi the finished work is composed no information is vouchsafed in the preface, but the publishers' advertisement states that there are to be ten or twelve monthly parts.

Chapter I. of the Atlas is devoted to the blood; Chapter II. to the epithelium; the two chapters filling up the first number and being illustrated by four quarto plates. The number of working histologists in the profession is very large, and by all such the Atlas will, we think, be received with the highest favor.

A TREATISE ON THE DISEASES OF INFANCY AND CHILDHOOD. By J. LEWIS SMITH, M.D. Fourth Edition. H. C. Lea, 1879.

The successive editions of this book follow one another with regularity, and become more and more trustworthy as their author advances in experience. The work has been so often noticed in our columns that it seems only necessary to chronicle the appearance of the new edition.

CHEMISTRY, GENERAL, MEDICAL, AND PHAR-MACEUTICAL. By JOHN ATTFIELD. Eighth Edition. Revised by the Author. Philadelphia, H. C. Lea, 1879.

We give a new welcome to this old chemical favorite, and predict a continuous course of success so long as its author maintains his physical and intellectual vigor.

### GLEANINGS FROM EXCHANGES

CASE OF MENSTRUATING ULCER. - Dr. George Buchanan reports the case of a married woman, 41 years of age, who had not menstruated in six years. About that time she sustained an injury to the leg, which was followed by the formation of a sore which had never been healed. On examination, an ulcer, eight inches long and six inches broad at its largest part, was found, situated on the outer aspect of the right leg. The edges of this ulcer were irregular, and its surface was covered with a grayish, un-healthy, not very copious discharge. No varicose veins. The day after examination, pretty copious hemorrhage occurred from the surface of the ulcer, sufficient to soak the bandages and to trickle on to the bedclothes. The patient asserted that for the previous six years the ulcer had bled for two or three days every month, just about the length of time of the previous menstruation. After the bleeding had ceased, the ulcer had the ordinary appearance of a callous, rather foul ulcer. A fly-blister was applied, which, in the course of two weeks, produced a clean red granulating surface, tending rapidly to cicatrization. (Unfortunately, Dr. Buchanan rushed into print at this period of the case, and the final result has not yet been published.) The interest of the case, Dr. Buchanan says, is in variety of vicarious menstruation.—Obst. Jour. G. B. and I., vol. vi., 1879, p. 780.

CUTANEOUS DESQUAMATION IN A LIVING FŒTUS.—Chanier gives the case of a healthy infant, born at full term, in whom the cord was green and red, flattened, and as if belonging to a still-born fœtus. The epidermis of the entire body came off on the least friction, just as in a macerated fœtus which has been dead a week. The epidermis of the foot came off like a glove. The day after birth, all the epidermis had come away except in two or three places upon the left thigh, the back, and the right arm. The child had by that time a normal color, proper temperature, and then was, and since has remained, a perfectly healthy infant. No evidence of eruptive fever or syphilis.—Obst. Jour. G. B. and I., 1879, p. 748; from L'Union Méd.

TEPID BATHS: THEIR INFLUENCE UPON THE PULSE.—Dr. Von Liebig says that during a tepid bath of 89°, which lasts for thirty minutes, the frequency of the pulse is very little lessened, but goes on decreasing during half an hour to one hour after the bath, which time corresponds to the chill that is always experienced after bathing. The temperature taken in the mouth rose a little during the bath, and sank after it, being lower two hours after the bath than it had been before it. The curves of the pulse, which were taken about an hour and a half after the bath, showed a slight deviation from the normal curve, the highest

point of the ascendant stroke being flattened and reascent of the down stroke entirely deficient. This is explained by the arterioles being contracted by the cooling of the skin, and thereby increasing the resistance in the arteries. The diminished frequency in the pulse

may be traced to the same origin.

The elevation of temperature during the bath is caused by the decrease in the loss of heat. The increased expiration of carbonic acid is explained by the fact that during the bath the lungs are not subject to the pressure of the water, the blood circulates more quickly in them. The skin is stimulated in different ways during a bath. These are, temperature of the water, pressure of the water, suppression of the exhalations of the skin, and in salt water the osmotic influence. On leaving the bath these effects of stimulation are of course changed.—London Medical Record; from Aertzl. Intelligenzbl.

JABORANDI IN ECZEMA.—From observations of the effect of jaborandi in cases of acute eczema, Dr. Ord believes it to be a drug of real value in that disease. It probably produces a hyperæmia of the skin which is favorable to the rapid removal of effete matters and to an improved nutrition of parts. Very little good has been done in this country with jaborandi as a curative agent, and it will be in-teresting to know from further experience if it can be relied upon as useful in the treatment of this class of skin affections. The dose is one-half a drachm to a drachm of the tincture of jaborandi three or four times a day, in a wineglassful or more of lime-water.—Medical Times and Gazette, January 11, 1879.

# MISCELLANY.

A TRIBUTE TO PROF. S. D. GROSS.—On the evening of April 10, at the St. George Hotel, in this city, a complimentary dinner was given to Prof. S. D. Gross by his medical friends, in commemoration of his fifty-first year in the profession.

The occasion was a most successful and joyous one, and was graced by the presence of many of the most distinguished physicians of this city and country, all of whom came to express, in word or deed, their respect for and appreciation of the services of the eminent

The room in which the dinner was given was handsomely decorated with flowers, and the table, decked with bouquets, was bounteously supplied with all that was good. Appropriate music, too, added to the charms.

After the inner man was satisfied, the formal speeches of the evening began. Prof. D. Hayes Agnew delivered the congratulatory address to the guest of the evening, at the conclusion of which he, in the name of the professional friends of Dr. Gross, presented

to him a gold medal, on one side of which was his monogram, set with diamonds, and on the other the following inscription:

Presented

Dr. S. D. Gross. by

His Medical Friends. In Commemoration of his

51st Year In the Profession, April 10th, 1879.

The reply by Dr. Gross was most happy. Professor Rogers welcomed the other invited guests, and Prof. D. W. Yandall, of

Louisville, responded.

To the toast, "American Surgeons," Professor Post, of New York, replied; to "The Medical Service of the Army and Navy," Surgeon Norris, of Washington; and to "The Medical Profession," Dr. Traill Green, of Easton, Pa.

Remarks, too, were made by Professor Silliman, of New Haven, Professor Austin

Flint, Sr., of New York, and others.

W. W. V. SIXTH DECENNIAL PHARMACOPŒIA CON-VENTION.—To the several incorporated State Medical Societies, the incorporated Medical Colleges, the incorporated Colleges of Physicians and Surgeons, and the incorporated Colleges of Pharmacy throughout the United

By virtue of authority devolved upon me as the last surviving officer of the Pharmacopæia Convention of 1870, I hereby call a General Convention to meet in Washington, D. C., on the first Wednesday in May, 1880, for the purpose of revising the Pharmacopœia of the United States.

For the information and guidance of all parties interested, I refer them to the rules adopted by the Convention of 1870, to be found on page II of the Pharmacopæia of the United States, and request their compliance with the spirit and intention of the aid rules. JAMES E. MORGAN, M.D. No. 905 E Street, N.W., Washington, D.C. said rules.

DR. H. C. WOOD has been elected Member of the National Academy of Science. It is said that this is only the second time a practising physician has been elected to that body, the first selection having been Dr. S. Weir Mitchell.

A NEW "Archive of Clinical Medicine" will soon appear, in Berlin, under the editorship of Frerichs and Leyden.

# NOTES AND QUERIES.

PHILADELPHIA, 2d April, 1879.

DR. H. C. Wood, Editor Medical Times:

DEAR DOCTOR,—I regret that you did not send me a proof of the little article in the last Times. There are a couple of errors, for the most serious of which I know that I am not responsible. Page 303, twenty-eighth line, should be "five

hundredths of one per cent. of hydrochloric acid." The last two words are omitted. Page 304, second column, twenty-first line from bottom, has made me state 61 of a centigramme instead of 61-111 centigrammes,—a serious blunder of the printer. The author quoted is not Mehn, but Méhu. I am rather careful about accuracy, and regret these little errors.

Very truly yours, WM. H. GREENE.

(It has been frequently stated in the journal that authors who desire proofs must write "send proof to author" at the beginning of the manuscript, with their address, otherwise proofs are not furnished. -Ep. P. M. T.)

#### OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY FROM APRIL 13 TO APRIL 19, 1879.

Town, F. L., Major and Surgeon.—Par. 4, S. O. 58, A. G. O., March 11, 1879, directing him to accompany recruits to Pacific Coast, is revoked, and he will proceed at once to Fort Vancouver, W. T., and report in person to the Commanding General, Department of the Columbia, for assignment to duty. S. O. 82, A. G. O.,

HARTSUFF, A., MAJOR AND SURGEON.—Assigned to duty as Post-Surgeon at Fort Wayne, Mich., relieving Assistant-Surgeon J. B. Girard. S. O. 55, Department of the East, April 10, 1879.

JANEWAY, J. H., MAJOR AND SURGEON.—Detailed as member of the Retiring Board in session in New York City, vice Surgeon J. H. Bill, hereby relieved. S. O. 92, A. G. O., April 16, 1879.

O'REILLY, R. M., CAPTAIN AND ASSISTANT-SURGEON.— Relieved from duty at Charleston, S.C. (post discontinued), and to accompany the command to McPherson Barracks, Atlanta, Ga. S. O. 63, Department of the South, April 11, 1879.

GIRARD, J. B., CAPTAIN AND ASSISTANT-SURGEON.—Relieved from duty in Department of the East, to accompany Twenty-Second Infantry to Department of Texas, and on arrival report to the Commanding General of that Department, for assignment to duty. S. O. 83, A. G. O., April 7, 1879.

ELBREY, F. W., CAPTAIN AND ASSISTANT-SURGEON.—Relieved from duty at Oglethorpe Barracks, Savannah, Ga. (post discontinued), and to accompany the command to McPherson Barracks, Atlanta, Ga. S. O. 63, c. s., Department of the South. Granted leave of absence for six months on surgeon's certificate of disability. S. O. 89, A. G. O., April 12, 1879.

HAVARD, V., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.

—To accompany Eighteenth Infantry to Fort Assiniboine, and upon arrival to be relieved from further duty there, and return to Department of the South. S. O. 35, c. s., Department of Dakota.

Reed, W., First-Lieutenant and Assistant-Surgeon.— Leave of absence extended fifteen days. S. O. 38, Division of the Pacific and Department of California, April 9, 1879.

Merrill, J. C., First-Lieutenant and Assistant-Sur-GEON.—Now on sick-leave; relieved from duty in De-partment of Texas, and to report in person to the Com-manding General, Department of Dakota, for assignment to duty. S. O. 87, A. G. O., April 10, 1879.

Perley, H. O., First-Lieutenant and Assistant-Sur-GEON.—Relieved from duty at Fort Pembina, to proceed to Bismarck, report for duty to Commanding Officer Eighteenth Infantry, accompany that regiment to Fort Assiniboine, and take station at that post. S. O. 35, Department of Dakota, April 12, 1879.

An Army Retiring Board having found the following medical officers incapacitated for active service, they are granted leave of absence until further orders, on account of disability, to take effect April 1, 1879;

SURGEON J. H. FRANTZ,

ASSISTANT-SURGEON W. E. WHITEHEAD,

"" T. F. AZPELL,

"" T. F. AZPELL,

"" H. J. PHILLIPS,

"" J. W. BUELL.

S. O. St. A. G. O., April 4, 1879.

S. O. 81, A. G. O., April 4, 1879.

# PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, MAY 10, 1870.

#### ORIGINAL COMMUNICATIONS

ON THE THERAPEUTIC USE OF JABORANDI AND PILOCARPINE IN EYE-DISEASES.

BY M. LANDESBERG, M.D.

(Continued from page 348.)

B. MURIATE of pilocarpine in hypodermic injections was used in the following cases:

Case I.—Mrs. W., 60 years old, came under my treatment November 23, 1878, with the following condition:

Right Eye.— $V. = \frac{10}{50}$ . With +10, Jaeg. 12. Left Eye.— $V. = \frac{10}{20}$ . With +10, Jaeg. 5. Cornea and lens of normal transparency. Intraocular pressure normal. Pupils of nor-

mal reaction.

Choroiditis absoluta peripherica, with circumscribed choroideal atrophies and pigmentinfiltrations into the retina of both eyes. Large floating opacities of the vitreous in the right eye, smaller ones in the left eye.

Patient, somewhat delicate but of healthy constitution, had never suffered from exhausting diseases (typhoid fever, etc.). No syphilitic history. Menstruation had stopped for about thirteen years. She is suffering with the right eye for eight months, with the left eye for some weeks. She has been treated with large doses of iodide of potassium.

I administered hypodermic injections of muriate of pilocarpine in doses of a quarter of a grain, at first every day, then every other day. Ptyalism set in after two minutes, profuse perspiration after three to five minutes, lasting for about an hour and a half. In the course of the injections the following aftersymptoms were observed: asthma, four times; vomiting, five times; abdominal pain, once.
An eighteen days' treatment had the follow-

ing result:

Right Eye.—Only very few and thin opacities of the vitreous remaining.  $V = \frac{10}{30}$ . With

+10, Jaeg. 3.

Left Eye.—Opacities entirely subsided. V.  $=\frac{10}{15}$ . With +10, Jaeg. 1. Fundus oculi un-

changed.

Case II.—W. C., musician, 43 years old, applied to me November 25, 1878, with the following condition:

Glaucoma absolutum and amaurosis of both

eyes. Intraocular pressure of the right eye = T. 3; of the left eye = T. 2. Of the right eye excruciating pain, which

prevents the patient from sleeping.

He asks relief of his condition, and is even

willing to have enucleated his eye.

On the same day I made sclerotomy of both

eyes. Of the left eye the healing process was absolutely normal, without any reactive symptoms. The intraocular pressure became normal.

The operation on the right eve was followed by very severe symptoms of irritation, by considerable chemosis and ecchymosis of the conjunctiva of the eyeball and of the lids, by violent ciliary neuralgia, and by repeated hemorrhages in the anterior chamber and in the vitreous. Paracentesis corneæ only aggravated the condition. In spite of application of eserine, of hypodermic injections of morphia, and the administration of hydrate of chloral, ciliary neuralgia progressed, intraocular pressure increased to that degree that the eye became as hard as a stone, and several infiltrations appeared on the cornea. On November 28 the lips of the wound were forced apart and prolapse of iris occurred.

I removed the prolapse of iris by drawing it somewhat outwards, and by these means succeeded in cutting off a large piece. The acme of the morbid process was broken. The inflammatory symptoms rapidly subsided, but the anterior chamber remained filled up with blood, without resorption taking place. In this condition I resorted to hypodermic injections of muriate of pilocarpine,

in order to induce resorption.

On November 30 I made a subcutaneous injection of a quarter of a grain of pilo-carpine, and repeated the dose after a quarter of an hour, the effect being only very slight. Perspiration, especially on the head, and ptyalism was very copious, lasting for about an hour and a quarter. With exception of slight rushing in the head and slight asthma, there were no unfavorable after-symptoms.

After five injections of half a grain of pilocarpine, the blood of the anterior chamber, chemosis of the conjunctiva of the eyeball and the lids were almost totally resorbed. A fine artificial pupil came into view, and the intraocular pressure was diminished.

In the course of the treatment vomiting occurred only once, partly through the fault of the patient, who had taken a copious meal an

hour previous to the injection.

The further course of the morbid process was very favorable. On December 11 all symptoms of irritation had subsided. Anterior chamber was clear and deeper than formerly. Intraocular pressure only somewhat increased. No pain whatever. General condition good.

Case III.—S. T., baker, 36 years old, ap-

plied to me December 14, 1878.

Present State.—V. of the right eye =  $\frac{20}{70}$ . Jaeg. 8.

V. of the left eye =  $\frac{20}{100}$ . Jaeg. 13.

Irido-choroiditis with anterior synechiæ and opacities of the vitreous of both eyes.

A mercurial treatment and iridectomy of both eyes gave the following result:

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V. R. =  $\frac{20}{30}$ . Jaeg. 2. V. L. =  $\frac{20}{40}$ . Jaeg. 5. Opacities in vitreous.

I resorted to subcutaneous injections of pilocarpine in doses of one-third of a grain. minutes after the injection, perspiration was very profuse and salivation exceedingly copious. Lachrymation was also very considerable. Patient suffered from asthma and pressure in epigastrium. Vomiting occurred twice. Perspiration continued for two hours. ptyalism for two hours and a half. unfavorable symptoms followed also the subsequent injections, for which I used only onequarter of a grain of pilocarpine. Patient suffered also from slight gastric catarrh.

After eight injections the result was as fol-

lows

V. R.  $=\frac{20}{20}$ . Jaeg. I. V. L.  $=\frac{20}{30}$ . Jaeg. 2.

Right vitreous perfectly clear; left vitreous shows still few very fine opacities.

Case IV.—L. A., carpenter's wife, 50 years

old, applied to me, January 9, 1879.

The examination showed: Beginning cataract of both eyes. V. R. =  $\frac{15}{50}$ . V. L. =  $\frac{15}{70}$ . With +10, R. E., Jaeg. 5; L. E., Jaeg. 8. Choroiditis æquatorialis absoluta, with circumscribed choroideal atrophies, pigment-macerations, and infiltration of pigment into the retina. Floating opacities in the vitreous.

In order to induce resorption of the opacities of the vitreous, and thus to gain better chances for a future operation of cataract, I proposed a treatment with pilocarpine, to

which patient readily submitted.

The injection of one-quarter of a grain of pilocarpine was followed by repeated violent vomiting, asthma, pain in abdomen and genitals; ptyalism was very strong, perspiration only slight.

General prostration and nausea kept on during the following twelve hours. After a pause of three days I again tried an injection of one-sixth of a grain of pilocarpine. Two minutes afterwards the face became purple; there arose humming in the head and tinnitus in the ears, with violent asthma. These symptoms subsided as soon as ptyalism and perspiration set in, which took place five minutes after the injection. But vomiting occurred several times, and nausea and general prostration were so great that I abstained from further trials.

Case V.-E. W., farmer, 25 years old, came under my treatment, June 19, 1878, with the

following condition:

Left Eye.—Intense subconjunctival injection; membrana Descemetii densely dotted; humor aqueus very dim; pupil (in consequence of protracted use of atropia) medium dilated; tissue of iris infiltrated; opacities in the vitreous; background of the eye very indistinct; vessels veiled; tension normal; violent ciliary neuralgia; eyeball tender to the touch.  $V = \frac{5}{200}$ . Jaeg. 18.

Right Eye.—V. =  $\frac{15}{30}$ . Jaeg. 2. Refracting media clear; intraocular pressure and reaction of pupil normal. In the background of the eye there are some peripheric choroideal atrophies, and infiltration of pigment into the retina.

The left eye had been suffering for six weeks. The right eye never caused any trouble, and patient cannot tell if its sight has been impaired. He acknowledges to have contracted a chancre seven years ago, which got well under mercury. After this he had enjoyed perfect health.

Therapeutics.—Atropia, warm poultices. Heurteloups. Internally, syrupus Gibertii.

On June 21 the refracting media were so clear that a thorough ophthalmoscopic examination could be made. It showed serous choroideo-retinitis.

Improvement gradually progressed. There

On June 24, V. L. =  $\frac{10}{50}$ . With +10, Jaeg. 10.

On July 2, V. L. =  $\frac{10}{20}$ . With +10, Jaeg. 3. In order to produce perspiration I put patient under the influence of decoctum Zittmanii.

A fortnight's use of this remedy brought vision to  $\frac{1}{20}$ . The inflammatory symptoms, the infiltration of the inner membranes, subsided entirely. There remained only few circumscribed atrophies and pigment conglomerations in the peripheric parts of the choroid, and some very thin opacities in the vitreous.

Vision of the right eye =  $\frac{15}{20}$ , Jaeg. 1. Background of the eye unchanged.

Patient was discharged August 3.

He applied to me again January 4, 1879. Examination revealed condition of the right eye unchanged. Vision of the left eye =  $\frac{2}{40}$ , but only by uplifting the eye to the utmost; with central fixation vision only  $=\frac{2}{100}$ , and Jaeg. 19. Intense subconjunctival injection. Cornea of normal sensibility and curvature. Humor aqueus turbid. Iris hyperæmic, swollen. Posterior synechiæ. Tension normal. Field of vision concentrically contracted. Membranous opacities in vitreous. Æquatorial choroiditis. Venous hyperæmia and slight infiltration of the optic disk. Serous infiltration of retina. Arteries normal, veins hyperæmic and tortuous.

Patient stated that his left eye had been in good condition from the time of his discharge until January 1. After having spent the new year's eve in a debauch, he was awakened towards five o'clock in the morning by pain in the left eye. During the day vision became dim, glimmering and spectral appearances (shower of sparks) set in. These symptoms aggravated during the following two days.

Under very unfavorable prognosis I resorted to acute mercurialization, combined with Heur-

teloups, cathartics, and atropia.

January 10, the condition was as follows: Subconjunctival injection diminished. Pupil dilated. Posterior synechiæ torn. Membranous opacities of vitreous somewhat increased. Background of the eye veiled. Downwards from the optic disk, at the distance of a papilla-diameter, there appears a small circumscribed globular elevation, over which the retina is tightly stretched. The retinal vessels take a steeply ascending course over this elevation. There is not the slightest fluctuation perceptible.

We have undoubtedly to deal here with a

detachment of the choroid.

Eyeball is somewhat soft. Patient counts

fingers at 10'.

I put him under the influence of hypodermic injections of pilocarpine, in daily doses of one-half of a grain. The treatment was very well borne. Ptyalism followed immediately; perspiration in the course of five minutes, lasting one hour and a half. Slight nausea, and glimmering before the eyes, were the only after-symptoms.

After four injections patient counted fingers at 15'. Some words of Jaeg. 15 were read. Field of vision much enlarged. Tension improved. But membranous opacities and back-

ground of the eye unchanged.

On January 15 the morbid process grew worse. Pronounced phthisis of the eyeball. Vision sunken to counting fingers at 2'. sides the membranous opacities there are large floating ones in the vitreous. Detachment of choroidea and retina (?) in the whole inferior half, extending like a sac into the vitreous.

Three further injections of pilocarpine having proved ineffective, further treatment was

given up.

Case VI.—Mrs. B., 31 years old, descends from a family in which myopia is hereditary. She has always been near-sighted, and myopia rapidly increased in the last years, due to overexertion of the eyes. In the winter of 1877-78, she first noticed the appearance of dark spots before the left eye, the sight of which often failed. It became veiled entirely by a dark cloud in April, 1878.

Different methods of treatment had proved ineffective to check the progress of the affec-

When patient first came under my notice, October 5, 1878, I made the following notes:

stober 5, 1878, I made the local states  $\frac{1}{18}$ , Right Eye.—M.  $\frac{1}{5}$ , myopic astigmatism  $\frac{1}{18}$ , Small H. M. V.  $=\frac{15}{40}$ , Jaeg. I, from 3''-5''. Small sclerectasia posterior. Slight serous infiltration of the peripheric parts of the retina. Rarefaction of the epithelium of the choroid. Some small choroideal atrophies.

Left Eye.—Slight divergent strabism. V. =  $\frac{5}{200}$  with  $\frac{1}{7}$ , Jaeg. 18 with  $\frac{1}{7}$ 5. Field of vision cannot be measured. Detachment of retina in its whole inferior half extending to the optic disk. Great torpor retinæ. Vitreous free. Intraocular pressure normal. Perception of color impaired. Ultramarine appears to be now green, now blue; violet, indigoblue, and Prussian blue appear dark.

The treatment of the right eye brought

myopia to 16½. Astigmatism disappeared. Vision rose to  $\frac{15}{20}$ . Jaeg. I was read from 3''-6½''. All morbid symptoms subsided entirely.

Induced by Fuchs's trial of pilocarpine in cases of detachment of retina, I proposed the same treatment to the patient, to which she

readily consented.

November 11, the examination of the left eye showed: Artificial mydriasis. Jaeg. 18

Counts fingers at 8' with +10. Field of vision, perception of colors, and fundus oculi, as above described.

I began the treatment in the evening of No-

vember 11, 1878.

At first I made an injection of one-sixteenth of a grain of pilocarpine, which had not the slightest effect. When I had injected as much as one-half of a grain, ptyalism set in, but no trace of perspiration; the latter began very slightly, on three-quarters of a grain, to increase a little, when the dose had reached one grain. The face was cool and damp; the body hardly warm. Lachrymation was somewhat increased. Secretion of saliva copious. Patient suffered from nausea and pressure in the stomach.

The slight effect of pilocarpine, notwithstanding the injection of such a large dose, is to be regarded here as the consequence of the action of atropia, under the influence of which the right eye had been kept from October 5.

The antagonism between atropia and jaborandi resp. pilocarpine was known long ago. (See *Berliner Klin. Wochenschr.*, 1875, No. 18.) The action of the latter remedy on men and animals can be totally neutralized by subcutaneous injections of small doses of atropia (already 0.0005 on men). In persons on whom the action of jaborandi is very prompt and certain, secretion of saliva and perspiration fails if they are previously given atropia.

These observations are in full accord with the statements of Haidenheim, according to which atropia possesses the power to paralyze the chorda tympani nerve, which promotes

secretion.

Also Schmidt-Rimpler observed that in some patients already a strong atropinization of the eyes has either retarded the effect of pilocarpine, or neutralized it totally. Berliner Klin. Wochenschr., 1878, No. 24.)

The antagonism between pilocarpine and atropia in my case was broken for once and all by the large dose of pilocarpine. withstanding patient continued the instillation of atropia, the effect of pilocarpine was very prompt from the third injection.

Not the slightest unfavorable symptoms followed the administration of the large dose

of pilocarpine.

November 14, I made the second injection of one-half of a grain of pilocarpine, adding one-quarter of a grain forty minutes afterwards. Almost immediately after the first injection the face became highly flushed. In

the course of two minutes salivation set in, to be followed by perspiration five minutes afterwards. Duration of perspiration one hour and three-quarters, of ptyalism two hours, lachrymation only slight. Nausea

very little.

The third injection of one-half of a grain pilocarpine had a very strong effect. Very of pilocarpine had a very strong effect. profuse ptyalism for two hours, and very considerable perspiration for one hour and a half. Nausea very considerable. Pain in abdomen. and vomiting. Great rushing in the head. Pulse in the acme 85; action of the heart increased. Sounds of the heart more intense.

The fourth injection of one-half of a grain resulted in profuse secretion of saliva and perspiration, with the after-symptoms of profuse lachrymation, slight nausea, and head-

After four injections the examination of the left eye, made November 18, showed the fol-

lowing condition:

V.  $=\frac{8}{50}$  with +12. With +5 some words of Jaeg. 12. Retina reattached in all parts, with the exception of the inferior inner quadrant. Field of vision much enlarged. Central fixation restored.

After the eighth injection there was:

 $V = \frac{8}{50}$ , resp.  $\frac{8}{40}$  with +14. With +5 Jaeg. 6. Detachment of retina only in the inferior inner quadrant, and much smaller than during the last examination.

After the twelfth injection there was:  $V_{\cdot} = \frac{8}{70}$  with +12. With +5 Jaeg. 11.

Background of the eye unchanged.

This impairment of vision coincided with the appearance of the menstrual function.

At the end of the treatment, December 14, after the seventeenth injection, there was:

 $V = \frac{8}{50}$  with +18; without glasses  $V = \frac{8}{100}$ . With +10 some words of Jaeg. 6 and 5. There is only a small, flat detachment in the inferior inner quadrant of the retina; all other parts are perfectly normal. Field of vision limited only upwards-inwards. Slight degree of torpor retinæ. Perception of colors; yellow appears white; light blue, Prussian blue, appear green; ultramarine and indigoblue appear dark blue.

January 13, 1879, there was:  $V = \frac{8}{40}$  with +18. With +10 some words of Jaeg. 5. No change in the condition of the retina.

In the course of the administration of pilocarpine vomiting occurred three times. A slight degree of nausea took place after each injection. After the eighth injection a slight gastric catarrh set in, which kept on during all the time of the treatment.

Case VII.-G. T., liquor-dealer, 57 years old, observed for five months a diminution of vision, which until then had always been perfect. The sight rapidly decreased during the last month. Until two years ago patient had always been healthy and strong. His muscular power and appetite gradually de-clined. General fatigue set in, and in the

last year his legs became swollen. For a short time he had been under homœopathic treatment, which failed to give any relief. Patient acknowledges to have always been a hard drinker, and that he is now covering the loss of appetite by ingestion of large quantities of different kinds of liquor.

The examination made February 5, 1879,

gave the following result:

Right Eye.—Hardly quantitative perception of light. Pupil medium dilated, hardly movable on reflex action. Intraocular pressure normal.

Left Eye.—V. =  $\frac{15}{50}$ . With  $\pm$ 10, Jaeg. 8. Pupil somewhat dilated, of slow reaction on light. Field of vision and intraocular press-

The background of both eyes shows the typical picture of retinitis as observed in Bright's renal disease. The only difference in the evidence of the eyes is that the apoplexies of the right eye, large and considerable, are scattered over the optic disk and the surface of the retina, while those of the left eye, of striated form, mostly occupy the peripapillary region, and that there are only some small hemorrhagic patches along the vessels.

Patient is a large, powerfully-built man. Face and mucous membranes are pale. The former and the lids are somewhat puffy and swollen. Muscles are flabby. There is slight ascites and swelling of the legs, especially on the ankles. The renal region is tender on pressure. On questioning patient, he tells us that he is obliged to urinate oftener than formerly, and that the daily quantity is much larger. The urine is pale,—palish yellow,—containing a large amount of albumen. The impulse of the heart is stronger and more extended. Sounds of the heart are very loud.

Patient had never suffered from uræmic attack, and had never been subject to head-

aches, convulsions, and spasms.

His mental capacities are unimpaired; hearing is unaffected. There is no history of

syphilis.

Under very unfavorable prognosis, and with the strictest injunction to sobriety, to which he earnestly pledged himself, I took patient under my treatment. It consisted in daily hypodermic injections of one-third of a grain of pilocarpine, which produced profuse salivation and perspiration. The treatment was very well borne. Nausea only inconsiderable, and not the slightest unfavorable effect on the action of the heart.

After six injections, vision of the left eye was  $\frac{15}{40}$ . With +10, Jaeg. 6. Background of the eye unchanged. No improvement what-

ever of the right eye.

General condition and appetite decidedly Hydrops of the legs, ascites, and better. amount of albumen in the urinary secretion diminished.

Four further subcutaneous injections brought vision to  $\frac{15}{30}$ . With +10, Jaeg. 4. Pupil of normal dilatation and reaction. In the background of the eye the resorption of some hemorrhagic spots could be ascertained; optic disk seemed to be less choked.

When I visited patient the next evening, in order to make a further injection, I found him beastly intoxicated, thus celebrating the improvement of his condition and his speedy

recovery.

I refrained from further treatment.

Case VIII.—Mrs. B., 66 years old, had always enjoyed good vision until eight weeks ago, when, consequent upon a violent fit of coughing, a dark cloud appeared before her right eye, the sight of which gradually diminished, in spite of the treatment to which she had submitted.

When patient came under my notice, March

21, I found the following condition:

Right Eye.—Sees the upper half of my fingers close by and peripherically outwards. Pupil somewhat dilated. Tension somewhat decreased.

Left Eye.—Cataracta incipiens.  $V = \frac{20}{100}$ . With +5, Jaeg. 4. Pupil contracted. Eyeball

of normal condition.

The ophthalmoscopic examination of the left eye revealed total detachment of retina in its inferior half, and large floating opacities of vitreous.

Patient readily accepted my proposition to try the effect of subcutaneous injections of

pilocarpine.

One-third of a grain was sufficient to produce profuse perspiration and ptyalism, setting in almost during the act of the injection, and lasting for two hours.

The first administration of pilocarpine caused pain in the epigastrium, vomiting, headache, and giddiness. The subsequent ones were better borne, the symptoms of nausea and uneasiness being very slight.

After six injections, vitreous proved to be somewhat clearer, but there was no change whatever in the condition of the detached re-

tina. I refrained from further trials.

Remarks.- Jaborandi and pilocarpine favor and influence the resorption of intraocular hemorrhages, opacities of vitreous, and serous effusions in a more reliable and more effective manner than any other resorbent remedy known up to the Their effects rather inpresent time. crease than decrease during the period of administration, and thus we are enabled to keep to the same dose without increase. The subcutaneous administration of pilocarpine is simple, and is not followed by any irritation or abscess at the point The unpleasant symptoms of injection. which occasionally follow both the use of jaborandi and pilocarpine are only temporary, even in those cases in which the complications forbid further continuance of the remedy. Patients recover very soon. Any unfavorable action on the heart, the lungs, the nerves, and the general circulation has not been observed.

The unpleasant symptoms which accompany the administration of jaborandi and pilocarpine being in some cases so very violent, the rule must be observed to begin at first with the smallest dose, and to act afterwards according to individual indications. Of course there are patients who seem to have a positive idiosyncrasy towards this remedy, whom the smallest dose prostrates so completely that further administration is forbidden. In general, hypodermic injections of pilocarpine have been better borne than internal ingestion of jaborandi.

Slight gastric catarrh was more or less common to all patients, and all, without exception, suffered, during the whole course of the treatment, from great thirst

and dryness of the throat.

The subcutaneous injections of pilocarpine having been used in recent times with great success for the induction of premature labor, and in cases of ataxy of the uterus, in order to raise its energy (see Archives for Gynacology, xiii. 2, and Wiener Med. Wochenschrift, Nos. 47, 48, 49, 50), the greatest precaution is required if the physician should be called upon to use this agent for other purposes in pregnant women.

How differently jaborandi and pilocarpine act on different persons we have been already taught by the cases cited above. The interesting experience made in my own person I will here briefly relate.

In order to know, by my own experience, the taste of jaborandi, I took about five drops of the fluid extract. After five minutes secretion of saliva became more copious, and within fifteen minutes genuine ptyalism set in, lasting three hours and a half. During this time slight perspiration of the whole body took place, with slight uneasiness and dizziness.

In regard to the use of pilocarpine as a myotic in eye-diseases, I must vindicate the great advantage of eserine over this drug. The qualities of eserine are more powerful and more efficient. Besides, pilocarpine possesses the very disagreeable features of increasing the action of the lachrymal gland, and, if absorbed by the blood, either through the mucous membranes of

the eyeball or the lachrymal duct, of producing ptyalism, as I had opportunity to observe in two cases.

1605 ARCH STREET, PHILADELPHIA.

#### PROPYLAMINE IN ACUTE ARTIC-ULAR RHEUMATISM.

BY JAMES L. TYSON, M.D.

THIS alkaloid (trimethylamine C,H,N) has long been employed in Continental Europe, and enjoyed a high reputation for every form of rheumatism, but I am not aware of its very extended use in this country. Professor Bartholow speaks of it, in his Materia Medica and Therapeutics, as moderating the fever and joint-pain, and "very decidedly shortening the duration of the disease;" and Dr. Gaston, in the Indiana Journal of Medicine, extols it as a prompt and efficient remedy in all uncomplicated cases, "subduing pain and soreness in from twentyfour to forty-eight hours." That its efficiency in the treatment of acute articular rheumatism has not been overestimated will scarcely admit of a doubt, in view of results where I have recently employed it. More extended observation and repeated trial, I am inclined to believe, will fully justify the merits ascribed to and the encomiums awarded it in this complaint, and would commend it to the earnest consideration of those whose prejudices exclude salicin and its compounds from their materia armamentaria. An important prerequisite is, that the alkaloid and its chloride be pure, which is not always the case. The best which I have seen were from the laboratory of the Messrs. Nichols & Co., of Boston, and that of the Messrs. Rosengarten, of Philadelphia, both being perfectly reliable preparations.

It would appear to be a settled conviction in the minds of some medical authors, for the past thirty years, and even of the present day, — men whose authority on many medical topics is unquestioned and unquestionable,—and enunciated as an aphorism with singular unanimity from which there was no appeal, that this distressing and painful affection must run its course, will yield to no treatment but palliative, and cannot be "stopped." If one cultivates the impression that this malady is beyond his control, that its arrest is impossible, would it not be well to cease his visits to a patient laboring under it, for the latter's

benefit? Facts may resolve and dispel this enigmatical fatuity. I would record my unqualified dissent from such oracular teaching, with the explicit declaration that it can be and has been "cut short" time and again, both in hospital and private practice, if we may credit the numerous reports of medical gentlemen whose names and characters attest their truth and integrity. It has occurred to myself, over and over again, to "break up" an acute attack of articular rheumatism, in periods varying from five to ten days, occasionally a little longer, without a vestige of pain or swelling being left, and not a trace of heart complication, by the employment of salicylate of sodium or vinous tincture of colchicum, separately or in combination. Under this treatment, patients require to be frequently seen, and their conditions and variations accurately noted. are now and then met with where these agents cannot be used, either from idiosyncrasy or some latent cause, grave depression, hyperasthenia, and nausea being so persistent as to forbid their further trial. and a resort to diffusible stimulants and tonics is imperatively demanded. Such instances have happened in my own practice, two of which I refer to more particularly as exemplifying the advantages we possess in propylamine. The patients were females, between 20 and 30 years of age, and each was attacked, at different periods of time, with pain and swelling of the wrists, and in one the phalangeal and metacarpal articulations were swollen and sensitive. From thence the pain radiated to the elbows, the shoulders, the sterno-clavicular articulations, the chest walls, involving the intercostals (pleurodynia), causing considerable dyspnœa, wandering to the hips, sacrum, femoral fasciæ, knees, ankles, and feet, including the aponeurotic expansion on the sole and dorsum of each foot. The fever was intense, the pulse ranging from eighty-five to ninety, accompanied by redness and swelling in all the parts implicated, with a hot, moist, perspirable skin. very nearly the condition of each. ing that neither could tolerate any preparation of salicin or of colchicum, I resorted to propylamine, using the chloride, the rather disagreeable taste of the alkaloid rendering it objectionable to some; the latter being equally potential in this complaint, its slightly saline character leaving

a not unpleasant impression on the mouth. It was combined as follows:

R Propylaminæ chloridi, gr. xxiv; Aq. menthæ piperitæ, Aquæ, āā f3iij.

M. Sig.—A tablespoonful every two or

The dose of propylamine is six drops, similarly prepared and administered. Giving the chloride as above, two grains every two hours, and swathing all the joints in cotton batting, benefit was apparent in the first twenty-four hours. For the pleurodynia a weak sinapism was applied to the chest for fifteen or twenty minutes, followed by a warm mush cataplasm. These were alternated occasionally through the day. In the one case ten days elapsed, when I could pronounce my patient well; in the other, five days passed, when she was entirely convalescent. A tonic of quinia is advisable when rheumatic symptoms have subsided. No disturbance or appreciable influence was manifested in the therapeutic action of the propylamine, other than a gradual abatement of fever, pain, swelling, and all the distressing nervous concomitants of acute articular rheumatism.

Would it have been a wise practice to abandon such cases to palliatives and nature, and allow them to run on indefinitely for weeks or months, terminating, in all probability, after a uselessly protracted suffering, by leaving the system more liable to renewed attacks, and the wretched accompaniment or prospective of valvular lesion of the heart, involving hypertrophy of that organ, with its fleshy columns and tendinous cords, and possible dilatation, often vaguely recognized, but not inaccurately designated, a rheumatic heart?

The good old Spanish maxim may convey a hint for some therapeutists to ponder: Ciencia es locura si buen senso no la cura.

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REPORT OF THE RESUSCITATION OF A YOUNG GIRL APPARENTLY DEAD FROM DROWNING.

BY E. L. B. GODFREY, M.D.,

Camden, N. J.

THE patient was a young girl, 12 years of age, of vigorous constitution, just rescued, in an insensible condition, from the

water. The exact time in which she was in the water could not be accurately ascertained, but when rescued she was cold, pale, pulseless, with muscular system completely relaxed, with no signs of breathing, animation to all appearances being completely suspended.

After placing the patient upon her back, clearing the mouth and throat of frothy mucus, drawing forward the tongue, and loosening everything about the neck, both arms were raised as far as possible above the head and quickly brought down to the sides, while the chest was forcibly compressed and the patient turned quickly over, face downwards. so as to admit of the escape of fluid. manipulations were twice quickly done, and had the desired effect of forcing considerable water and mucous froth from the airpassages. After the escape of the water, the patient was placed upon her back, the tongue again drawn forward, and the movement of the arms, according to the method of Dr. Sylvester, with manual compression of the chest, was repeated, first slowly, then gradually increased to about twenty times per minute, with all possible regularity and gen-Efforts to promote warmth of body and activity of circulation were not unduly made until signs of returning animation were observed, which were gasping, convulsive tremors of the muscles of the face, and vomiting. After these, the limbs were vigorously rubbed, chiefly towards the heart; dry warmth applied to the groins and axillæ; sinapisms to the extremities, along the spine, and over the precordial region; ammonia passed under the nostrils, and flagellation, so highly and justly extolled by Professor Gross, vigorously applied by my assistants. Artificial respiration was continued all this time. After vomiting occurred, efforts at breathing became more marked, from greater play allowed the diaphragm. Then, after two hours of hard work, I was rewarded by the appearance of the unmistakable signs of returning animation. Stimulants were administered, pro re nata, as soon as patient could swallow, and when breathing and consciousness became well restored, patient was placed in a warm bed. Every indication to over-action was promptly met by the usual remedies, and the next morning the patient was convalescent.

Remarks.—In this case I believe manual compression of the chest, which forced the carbonic acid from the lungs and mucous froth and water from the air-passages, and thus allowed the free ingress of air, contributed very materially towards the establishment of respiration.

The manipulation of the chest was easy of execution, owing to its size. Manual compression of the chest was more particularly brought to the notice of the profession by Dr. Benjamin Howard, of New

York, in an article read before the American Medical Association in 1871, and is certainly a very material modification of the method of Dr. Sylvester, of London. The extensive inquiries instituted by the Royal National Life-Boat Institution of England among medical men and medical bodies have been the means of establishing a number of principles and directions to be carried out in effecting the restoration of the apparently dead from These principles are more esdrowning. pecially founded (since the abandonment of Marshall Hall's) on those devised by Dr. Sylvester. Sylvester's method is too well known to need mention, but its active employment, if persistently followed, will often give the most flattering results, as is shown in the case reported, and also in a case reported by Mr. Douglas, in which no evidence of respiration was perceived until after the manipulations had been uninterruptedly performed for eight and a half hours. The period at which people die during submersion varies, of course, but recovery is said to be doubtful after a submersion of two minutes. Animation, however, is not completely suspended at once, unless the person is overcome by fright, injury, or coldness of the air and water. Even the Navarino sponge-divers are said not to be able to sustain submersion longer than twenty-six seconds, while the pearl-divers of Ceylon, according to Mr. Marshall, can seldom remain under water longer than two-thirds of that time. Syncope during submersion is favorable to recovery, as the system in that state is not in as urgent need of oxygen as in its active This is well shown in the case reported by Dr. Wooley, in which a girl, while in a state of syncope, fell into the water, and was restored to life after having been submerged six minutes.

Experimentation has shown that drowning is more speedily fatal to life than ordinary suffocation; that the chances of recovery are lessened from the effects produced on the lungs by water; that the lungs become passively congested; that as unconsciousness approaches, during submersion, water enters the air-passages and air-cells of the lungs, and that, from the congestion of the lungs and the water in the air-cells, there results a bloody, frothy mucus, which not only fills up the air-cells and blocks up the smaller bronchial tubes, but penetrates the intimate

structure of the lungs, rendering them cedematous, and thus physically unfit to receive or expel air by respiration. Thus, in cases of apparent death from drowning, the chances of recovery depend less upon the action of the heart than upon the quantity of frothy mucus present in the air-passages and its penetration into the intimate structure of the lungs.

A CASE OF VILLOUS GROWTH OF THE BLADDER TREATED WITH QUINIA.

BY THOMAS H. STREETS, M.D., U.S.N., Yokohama, Japan.

In the number of the American Journal of the Medical Sciences for January, 1879, p. 107, is an article by Dr. D. B. Simmons, on the sedative action of quinia on the neck of the bladder when administered internally. I desire to present some further testimony in corroboration of this action of the drug. The following case, from the same locality, was of a similar nature to the one presented by Dr. Simmons, and it possesses the advantage of having a more clearly established diagnosis:

J. R., æt. 29, was admitted into the U.S. Naval Hospital at Yokohama, Japan, February 12, 1879, with hæmaturia and great irritability of the bladder. The disease had existed twelve days previous to his admission. The patient had hypospadias, which he said was congenital. The orifice of the urethra was contracted, and was situated on the under surface of the glans, near its base. There was slight tenderness when strong pressure was made over the pubes; no pain in the perineal region. Patient voided his urine about every fifteen minutes, in small quantities, and the act was accompanied and followed by great vesical tenesmus and some pain, which was referred to the head of the penis. The urine was very bloody, the blood being intimately mixed with the urine, which was the color of claret-and-water. There was the color of claret-and-water. likewise came away from the bladder, with every passage of the urine, a number of solid masses, which preserved their structure when washed in water, and under the microscope presented a branching, villous-like appearance. The patient gave a history of gonorrhoea nine years before, and an attack of hemorrhage from the bladder six years previous. The latter, he stated, the doctor told him was probably caused by a heavy strain in lifting.

The patient was put to bed, warm fomenta-

tions applied over the bladder, and quinia given internally, in five-grain doses, three times daily. This treatment was continued for two days without appreciable benefit. The dose of quinia was then increased to x grs. three times daily, and continued for two days with like results. During these four days he continued to suffer great pain whenever he attempted to pass his urine, and the attempt was made every fifteen minutes or half-hour during the day and night. The urine remained as bloody as in the beginning, and he continued to discharge fragments of the villous growth. On the 16th, quinia was increased to xv grs, three times daily, and this was followed by almost immediate amelioration of all the symptoms. Improvement was first noticed on the afternoon of that day. On the 18th there was scarcely any pain and very little blood, but he continued to pass urine almost as frequently as before, and to discharge fragments of the growth. The urine had now lost its bright-red color, and was smoky. On the 19th there was no evidence of blood in the urine, but its place was taken by pus, of which there was about half an inch in the bottom of a pint bottle which had been used to collect the discharge during the night. The patient was so much cinchonized that it was deemed advisable to discontinue the use of quinia on the 20th.

There was now no pain, but micturition was frequent. At the same time that the quinia was discontinued, gallic acid in two-grain doses, three times daily, was commenced. There was no return of blood or tenesmus, and he ceased to pass fragments of the growth on the 21st. The quantity of pus gradually decreased until the urine became perfectly clear, of a light-straw color, reaction alkaline. The only symptom of the disease now remaining was an increased frequency in passing urine, —eight or ten times in the twenty-four hours.

The man deserted from the hospital on the 27th, at which time all the functions of his bladder were normal. The quinia was given in solution, and it probably continued to be excreted by the kidneys in sufficiently large quantities to affect the bladder for forty-eight hours after its use was discontinued, for about that time the symptoms of cinchona disappeared.

# NOTES OF HOSPITAL PRACTICE.

# BELLEVUE HOSPITAL, NEW YORK.

CLINIC OF DR. EDWARD G. JANEWAY,

Professor of Pathological Anatomy and Histology, Diseases of the Nervous System, and Clinical Medicine in the Bellevue Hospital Medical College.

(Reported for the *Philadelphia Medical Times*.)

PARALYTIC CHOREA.

GENTLEMEN,—Our first patient today is a little girl, 9 years old, whose family history, I learn, is good.

Three years ago she had an attack of convulsions, which does not seem to have been followed by any exanthematous disease, such as scarlatina or measles. It is important that we should get at the cause of these convulsions, if possible; and on making some further inquiries I find that they are probably to be attributed to one of two things: the irritation of undigested food in the alimentary tract, or to fright. mother informs me that, previous to the attack, she had eaten a pretty large quantity of green peas, and also that, about an hour before the occurrence of the convulsions, her teacher whipped her at school. Perhaps both of these causes may have had something to do with the development of the convulsions. When we come to pursue our investigations further and ask if there was any result following the seizure, it is stated that the whole right side of the child became paralyzed, although the face does not seem to have been involved in the paralysis. Presently an improvement in the condition of the limbs was noticed, but it was nearly two months before there was a complete recovery of power in them.

At present, as you perceive, the child looks well nourished and as though she enjoyed good general health; but when I ask her to reach out her right hand to take any object, you at once notice the peculiar movements so characteristic of chorea. This, then, is to be set down as a case of paralytic chorea. Here there is no rigidity whatever, although this is frequently the case. It was present in a marked degree, as some of you will perhaps remember, in the young man whom I brought before you last winter. The chorea in the present instance is undoubtedly due to some lesion left over from the attack of convulsions previously spoken of, and I think this girl is, on the whole, to be regarded as fortunate because there has not been a more serious result. In some cases patients are left speechless, and in some, idiotic.

Next comes the question, What can we do for her? Not infrequently paralytic chorea is hopeless, on account of the long time that has elapsed since the original trouble occurred, as in the case of the young man before mentioned, but here it is certainly worth while to make an attempt to accomplish something in the way of treatment. I should therefore recommend a systematic course of training for the

muscles, the constant encouragement on the part of her mother to the use of the affected limb, frictions of the muscles, and the application of electricity, together with the internal administration of strychnia. In addition, great care should be taken in the general training and education of the child, and, while sufficient firmness should be employed to secure obedience, she should be treated with uniform kindness, and above all things her parents and teachers should be on their guard against causing her any fright.

WAXY DEGENERATION OF THE LIVER AND SPLEEN, DUE TO PROBABLE INHERITED SYPHILIS.

The next case is that of a boy of 16, who says that about ten months ago he fell out of a window and hurt his leg, which has been sore ever since. On making an examination of the left leg, accordingly, we find extensive lesions. It looks as if there was necrosis of the tibia; and there is, at all events, well-marked ulceration, reaching down to the bone. furthermore notice that the whole appearance of the lad indicates a greatly depreciated condition of health, and that upon his forehead, face, and both the upper and lower extremities there is a more or less distinct eruption, which is, to some extent at least, of the nature of purpura.

When we make an inspection of the trunk we find that there seems to be a slight fulness upon the right side of the abdomen, in the hypochondriac region. and palpation reveals the existence of a smooth and rather firm enlargement, which extends across the abdomen to the left side. where there is another similar but smaller enlargement, just below the level of the last rib. As a distinct notch can be felt between the two, it is evident that there is not simply one mass reaching from one side to the other. From their position, and other circumstances, it is not difficult to decide that we have here to deal with an enlarged liver and an enlarged spleen.

It is important, therefore, to find out, if we can, the origin of these enlargements, and what causes the general cachectic appearance of the patient. As to the eruption here present and the ulcerations upon the leg, if they were to be met with on the person of an adult we should be likely to refer them to only one thing,—syphilis; and even in this boy it seems the most probable explanation of the phenomena

noticed. It is quite possible that here the disease may have been either acquired or inherited. According to his own confession, the lad has been somewhat wild, and was sent to a reformatory institution for confirmed truancy from school; and I have known an undoubted case of acquired syphilis at the very early age of thirteen years. Still, it is more probable that the disease has been inherited, and, in partial confirmation of this, the patient informs me that his father also suffered from a sore As to the condition of the liver that is present here, there is a smooth, general enlargement of the organ, which may be due either to interstitial hepatitis-characterized by the occurrence of minute miliary. gummy growths, the result of syphilis—or else to waxy degeneration. The hypertrophied spleen found here would correspond to either condition; although in waxy degeneration the organ is rarely much enlarged. In the books, enlargement is generally put down as a diagnostic point in making out waxy degeneration of the spleen; but this is so frequently very slight that it cannot be relied upon, and is therefore very apt to mislead. In a patient of this age, however, I should expect to find a greater proportional degree of enlargement in this condition than in an adult.

On account of the enlargement of the spleen that is found here, we have, perhaps, some reason to suspect the presence of leukæmia; but when I now make a microscopical examination of a drop of the patient's blood, I find that there is no increase whatever of the white globules, and we can therefore exclude this condition

with positiveness.

If this liver felt somewhat granulated or nodular to the touch (instead of perfectly smooth, as it does), it would point strongly to cirrhosis. Of course this condition is rare in such youthful patients, but only today I made a post-mortem examination in the case of a girl thirteen years of age, where we found a cirrhotic liver (whose surface was, however, quite smooth) which weighed no less than seven pounds. in that case there was a certain amount of jaundice during life, while here there has been neither any jaundice nor ascites. Ascites, I may remark, is very rare in connection with waxy degeneration of the Here the urine is pretty large in quantity (forty ounces in the twenty-four hours), but its specific gravity is normal,

and only on one occasion has it been found to contain albumen, although repeatedly examined. Albuminuria is not usually found resulting from waxy kidney, unless there is parenchymatous nephritis present also, constituting what is known as the large

white kidney.

I feel inclined from these considerations, therefore, to regard the condition here present as due to waxy degeneration resulting from secondary syphilis, rather than to cirrhosis. We cannot be too cautious in expressing an opinion, however, in such a case as this. The boy claims that he has never been a hard drinker; but Niemever relates the cases of two girls, aged respectively thirteen and fourteen years, where in each instance well-marked cirrhosis of the liver was found after death. There had been no reason to suspect that they had been at all intemperate, but it was afterwards ascertained that both of them had for some time been addicted to the habitual use of schnapps.

In the treatment here I shall recommend anti-syphilitic remedies; but it would be a great mistake to treat the case, in the present condition of the boy, for syphilis alone. If we did not take into consideration the cachexia here present, we might indeed cure the syphilis, but we should be very likely to kill the patient in doing it. Whatever else is given, cod-liver oil and iron are imperatively demanded in the case, and the greatest care should be taken to build up the general health in

every possible way.

LATENT PNEUMONIA—PROGRESSIVE MUSCU-LAR ATROPHY.

This young woman of 23 came into the wards some little time ago extremely emaciated and anæmic, and giving us every reason to fear that she was the subject of phthisis. There were crepitant râles over the region of the right scapula, and some slight signs of trouble at the apex; and she said she had had a cough for a year. my surprise, when I saw her again a few days ago, I found that she had improved wonderfully in appearance, and that the pulmonary signs and symptoms had almost entirely disappeared. This I believe now to have been a case of that form of pneumonia which is known as latent pneumonia, and which is more common in children than in adults. In this the inflammatory consolidation remains for a long time unresolved, but at last undergoes complete absorption. In one case of double pneumonia, which was under my care some time ago at Charity Hospital, resolution did not take place for two and a half months, and the process was not completed until more than three months had elapsed. The patient in whom this occurred, I may mention, was an opiumeater, who ordinarily used about ten grains of morphia a day, so that his being deprived of the drug while in the hospital may have had some effect upon the course of the disease.

There is another point of interest in connection with this case to which I should like to call your attention, and that is, that there is very marked atrophy of the adductor pollicis and of some of the interosseous muscles of the right hand, and also a loss of power in the extensors of the right arm. The dynamometer shows that the left hand is now stronger than the right, although she is naturally right-handed. cannot ascertain that she has been subjected in any way to lead- or arsenic-poisoning: but she has been accustomed to a life of great hardship,—by day sleeping in a dark and damp basement, and at night following the practices of a prostitute. We conclude, then, that we have here progressive muscular atrophy, with a slight amount of pneumonic phthisis.

In the former affection there is supposed to be a lesion of the anterior horns of the gray substance of the spinal cord, and this is usually found to be a degeneration of occasional cells. In some cases, however, the trouble seems to be confined exclusively to the muscles themselves, and no disease of the cord whatever can be detected after death. The treatment here will consist of such measures as will tend to improve the general condition, and in the application of electricity to the affected muscles. It should be stated, before dismissing the case, that the urine of this patient is normal in character.

nt is normal in character.

#### PLEURISY IN THE INCIPIENT STAGE.

Our last patient to-day is a man who, without receiving any injury, was taken five hours ago with a very sharp, stinging pain in the left side, near the lower border of the ribs. He has no cough, and, when he tries, can take a pretty full breath; but any movement involving the affected part, or any pressure upon it, is attended with acute suffering. It is probable that this is

not intercostal neuralgia, because no pain whatever is felt when pressure is made over the origin of the intercostal nerves. When auscultation is resorted to, no frictionsound, crepitus, râle, or any other abnormal physical sign whatever can be detected; but, as the patient has some slight febrile reaction, I am disposed to believe that we have here a case of commencing localized pleurisy. This is the probable diagnosis here, and it is principally on account of the affection being in such an early stage that we rarely have an opportunity of meeting with it, that I have brought the man before you. I propose to do here is simply to put the patient to bed, and apply strips of adhesive plaster, so as to secure perfect rest to the affected part. By to-morrow the diagnosis of pleurisy will be either confirmed or disproved.

#### TRANSLATIONS.

Syphilis as a Cause of Aneurism.— Fournier, in a discussion on this subject in the Société Méd. des Hôpitaux, says that in syphilitic aneurism there is proliferation of cellules giving rise to sclerosis and a bossillated, nodular condition of the ves-If these lesions are produced by syphilis, aneurism must almost necessarily follow, on account of the narrowing of calibre, diminished resistance, etc. Fournier thinks syphilis is hardly so frequent a cause of aneurism as is asserted by the English. Physicians are said to have completely cured cases of aneurism by iodide of potassium. How this can be where the mischief is already done before the signs of aneurism can be noticed, does not appear. Mercury and iodide of potassium can only act upon the preparatory material, not upon the altered structure.-La France Méd., March 5, 1879.

ABSORPTION THROUGH THE MUCOUS MEMBRANE OF THE BLADDER.—Cazaneuve and Livon allude to the fact that in a condition of health the epithelium of the mucous membrane of the bladder does not permit the passage of urine and the absorption of urinary constituents. Such absorption, however, may be feared in inflammatory conditions of the bladder. Retention of urine in a patient with cystitis may, therefore, be followed by absorption of the urinary constituents. Where

the urine is ammoniacal this is more likely to occur. On the one hand, this absorptive power indicates an opening for medication in cystitis; on the other hand, however, it indicates some fear of the absorption of injurious materials.—Cbl. f. Chirurgie, 1879, p. 204; from Revue Mensuel.

MULTIPLE LIPOMATA.—C. von Lutzav describes the case of a man 63 years of age, himself healthy, and the father of healthy The formation of fatty tumors children. began when he was four years of age, and when examined by Lutzav there were no fewer than 2436 over the man's body. Lutzay has collected twenty other cases from medical literature, by comparison of which he comes to the following conclu-The formation of multiple lipoma is rare; it is not connected with advanced age; both sexes are equally subject to the affection. The usual seat of the tumors is the subcutaneous connective tissue, particularly of the buttocks and lower extremities; they are rarely found about the head and face; never on the palms and soles. The number which may exist is unlimited, and they may vary in size from that of a lentil to that of an infant's head. tumors, are flat, with a broad base, seldom polypoid, the surface smooth. Small tumors are rarely seated upon larger ones. In structure, lipomatous tissue is like that of fatty tissue everywhere. There appears to be a lipomatous diathesis. Metamorphosis of the tumors rarely occurs, but multiple lipoma is not absolutely benign. - Cbl. f. Chir., 1879, No. 12; from Inaug. Diss., Dorbat.

ATOMIZED ETHER IN VOMITING OF PREGNANCY.—Drs. Lubelski and Brochin have obtained the most flattering results in cases of rebellious vomiting of pregnancy, from the use of douches of atomized ether (Richardson's apparatus) over the epigastric region and over the middle of the back, continued for three or four minutes, and repeated every three or four hours. Cases have yielded to this method which had frustrated all other remedies.—La France Médicale (published in the Giorn. Internat. delle Scienze Med., Napoli, 1879). G.

CUBEBS IN WHOOPING-COUGH.—Dr. P. M. Sanchez has obtained rapid cures of cases of whooping-cough by the administration of an ethereal tincture of cubebs in doses of four or five drops three times a day.—Gaceta Med., Havana, March, 1879.

# PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, MAY 10, 1879.

#### CORRESPONDENCE.

#### LONDON LETTER.

BEFORE the days of rapid locomotion by railways there were provincial centres which were, to a certain extent, localized metropoles, where there was much talent. Norwich, situated in the east, and Leeds, the queen of the West Riding of Yorkshire (though not the county town), have been

noted for their surgical talent.

The Heys first made Leeds famous, and then came the Teales. Bright, cheery, genial people are the Heys, with marvellous memories, ready at a moment's notice to give minute details of some case seen thirty years before, and to contrast it with a case under their immediate notice. The Teales are keenwitted, far-seeing, precise creatures, who know their work to the minutest details.

Such being the case with the leaders, the

followers acquire the same characteristics,that is, so far as they are capable of doing so. Nowhere in the world is there better surgery to be found than in Leeds. In making this statement, there is no intention to disparage the physicians of Leeds. Clifford Allbutt's name is sufficient in itself to take away anything which may sound invidious in speaking of Leeds medicine as compared with Leeds surgery. Still, the fact remains that it is for its surgery that Leeds has been chiefly famous. But these conspicuous surgeons were good all-round practitioners as well as able operators, and it is in the person of Mr. T. Jessop that probably the best modern representative of these all-round men of the past generation is to be found. Yorkshire men have a number of sterling qualities, and, though they are keen about money-making, they are not parsimonious about money-spending. The General Infirmary of Leeds is a palatial structure, of which the Leeds people are justly proud. But the admiration excited by the outside appearance is only increased when the wards are visited. There is no London hospital which can compare with the Leeds Infirmary for its perfect cleanliness and internal arrangements. The strict philanthropist may possibly object to the amount of money spent in what might, from one point of view, be termed decorative ornamentation, but this keeps up the general tone, and pride may be a useful thing when it takes a self-respecting direction. The house-surgeon who walks round these handsome wards feels put upon his mettle, and strives to be in harmony with his sur-

roundings. It is much easier to cultivate self-respect in handsome wards than in the squalid rooms-of the Manchester Infirmary, for instance, and the residents of the Leeds Infirmary have a natural and creditable pride in their institution, and are stimulated thereby to the efficient discharge of their duties. The man whose foot presses on the well-waxed floor of these wards is inspired to keep his work in unison with his environment, and therefore cultivates himself with enthusiasm. The same influence is exercised upon the honorary staff, who feel that they are connected with a place of first-class standing. The money spent upon the architectural details of the Leeds Infirmary is, therefore, not money wasted, though it may not show a tangible percentage; it is in its moral influence that it reaps its reward. Where there has also existed for generations a conspicuous surgical family, others are stimulated to emulate the example set them, and the influence exercised by the Heys has not been confined to past generations, but exercises a perceptible action at the present time. There is no coming Hey, unfortunately, to sustain the time-honored name so well known in surgical literature. As to the Teales, the present representative of the family not only fully sustains his father's reputation, but has actually excelled it; and perhaps the very best eyework in the world is done at Leeds. I know, at least, that, when more intimately associated with Leeds than I am now, such results could be attained there as could not be rivalled at Moorfields, in spite of Mr. Jonathan Hutchinson himself. There have been, and are now, in Leeds, good men and true, whose names have not attained the celebrity of the well-known names of Hey and Teale.

The antiseptic plan of treating wounds and injuries is now thoroughly accepted at Leeds; and there were to be seen, the other day, some stumps healed by first intention, which were simply pictures of what one would like to see generally attained in surgery. My memory may be serving me unfaithfully, but my impression is the house surgeon told me that the last twenty-seven amputations had been successful; not one had died. The opinion there is unanimous in favor of careful dressing, perfect cleanliness, and antiseptic precautions. Some of the cases were specially interesting. There were several cases where amputation of the penis for cancer had been followed by an operation for bringing the urethra out in the perineum; by which means greater comfort and convenience for the patient were attained. Of course a feminine attitude had to be maintained during the act of micturition. Then there were some cases of extroversion of the bladder being treated by Mr. Jessop by scraping off the mucous surface at intervals. By this means it is found that the mucous surface is made to approach skin in character, and thus is rendered much less sen-

Time and patience are required, and repeated operations at intervals of several weeks, to attain the desired end. There were, too, a number of cases of knock-knee, treated on Ogston's plan of subcutaneously sawing off the internal condyle and then straightening the legs. The bone detritus is left in the joint, and does no harm there, and there is no secondary or subsequent inflammation. In speaking of these knee cases, I am reminded of what the house surgeon said of a severe injury to the knee taken in lately. The knee-joint was laid open freely, with antiseptic precautions, and the case did perfectly well, were a large number of cases of great interest to the surgeon, which of course a physician can scarcely be expected to appreciate. On the medical side there were a great many cases of great interest clinically but not so much so therapeutically; and it may be stated, without any wish to wound the susceptibilities of the Leeds physicians, that they have not manifested in the past, and do not now in the present display, the same lively enthusiasm in treatment which is exhibited in so very marked a form by their surgical colleagues.

One case struck me very forcibly, viz., that of a burnt child. It was not deeply burnt, but the area was large, involving the anterior aspect of the chest. It did not give the impression of being in acute pain so much as of being very miserable, as it helped the nurse to put on the dressings. There was no ap-parent reason why, in all human probability, that child would be dead in twenty-four hours; though experience tells in unmistakable accents that such is almost the certain prog-Collapse inevitable and unavertible comes on after such burns. The house surgeon, a most intelligent fellow, inspired with much therapeutic enthusiasm, both before and after he was under my own personal influence, told me that, in spite of digitalis, or strychnia, or belladonna, collapse would come on. depressed me very much, and I do not feel at all satisfied on the subject; and it would be very interesting to know if doses of these agents much larger than those in ordinary use would not be of service. The burnt patient can but die, and, as death in these cases is so certain, the dose might be pushed. It would probably be found that in the deep depression caused by the shock of the burn, a great tolerance of strychnia and belladonna exists, and that immense doses are required to produce any good effects. The case strikes me as presenting largely the features of a toxic dose of a depressant, to be met and antagonized by toxic doses of some stimulant to the circulatory and respiratory centres. Certainly at least there is room for investigation in this matter, and, even if the analogy betwixt the shock produced by a burn and the condition induced by a toxic dose of a depressant is not found actually to be as complete as it a priori appears, knowledge of a valuable kind will almost certainly be afforded by inquiry. it will be of no avail, and only mislead, if the doses in ordinary use are given. If this be done, the results will surely be unsatisfactory. and tend to stifle further inquiry into an interesting field of research. If atropine be given in doses of one seventy-fifth of a grain, the attempt had better never be made: it might be well to start with a twenty-fifth, following this up with like doses every half-hour if the collapse is becoming pronounced. of strychnia, to commence with, might be onefifth of a grain, repeating this three times at intervals of one-half or three-quarters of an hour, as the case required. Of course a certain amount of therapeutic enthusiasm and boldness would be requisite to induce a house surgeon to run the risks of blame and censure if a fatal result, other than that of indisputable and unmistakable collapse, should take place; but all pioneers must run risks. At any rate, the subject is one which contains considerable promise; and the cases of col-lapse treated by atropine recently recorded in your columns would be well supplemented by an inquiry into the utility of toxic—or at least of immense—doses of strychnia and belladonna in cases of burn-collapse.

To return to the subject of the Leeds Infirmary, it is my strong impression that Americans over in Europe to see what is going on are in error in not more frequently spending a few days in Leeds during their sojourn in England. They would find a magnificent building, itself well worth seeing; they would find under one roof splendid cases in the medical wards, with good efficient clinical teaching, and in the surgical wards they would see work that would excite their enthusiasm. If they found the therapeutic aspect of medicine more actively developed on the surgical side, it would lead them to inquire into the cause, and probably the explanation which would seem most feasible is this: in past days the leading practitioners and consultants were surgeons,-men who could cut for stone and amputate a thigh when necessary, but who at the same time were good all-round men and accomplished physicians to boot. Such surgeons were quite as commonly summoned away in consultation to see a case of pneumonia or congestion of the kidneys as they were to amputate a disease of the elbowjoint or to pass a catheter. Mr. Wheelhouse could probably be of equal service in all these cases, and put on a pair of long forceps or turn at a breech presentation just as well and with equal skill. When, then, leading surgeons were leading consultants, physicians did not occupy very prominent—or, rather, commanding—positions. Dr. Hodgson, of Leeds, the friend of Charles Waterton the famous naturalist, was a physician of high repute in his day; and at present Dr. Clifford Allbutt's position is one of great and deserved standing.

The following case is one of great interest. and opens up a new vista in the future, while it illustrates from a practical point of view the importance of further knowledge of the rhythmic disturbances connected with the catamenial cycles, so well described by Dr. Mary Putnam Jacobi in her prize essay on "Rest for Women during Menstruation,"—a work too little read. There she shows that there is a rise of temperature and blood-pressure gradually ascending from the termina-tion of the menstrual week, and culminating at the commencement of the menstrual flux. during which time they both fall,—these alternating rises and falls constituting the catamenial cycle. Some time ago I was summoned into the provinces to one of our university towns, and found a lady of 38 in the following condition. She was flat on her back in bed, wandering considerably; her tongue brown, with sordes on her teeth; her temperature 103° Fahr., at which point it had stood for six days; her pulse 120; her respirations 40. The urine was highly albuminous. There was a well-marked arcus senilis in each eye. The lady had had a family rapidly; she had been confined five weeks. She was supposed to have caught a chill which started her malady. The case certainly looked black enough; but, knowing something of her family on both sides, I commenced to search for some local cause for the symptoms, suspecting pelvic cellulitis. A careful search elicited nothing but a patch of congestion at the back of the left lung, whose presence had been recognized for some days, and which was obviously a consequence and not the cause of the general pyrexia. local doctors held out no ray of hope; yet I ventured to suggest the possibility of recovery. A draught of laudanum and hyoscyamus at night, and quinine four grains, tincture of digitalis and phosphoric acid each fifteen minims, every six hours, were prescribed, and a dietary of milk with some brandy insisted In forty-eight hours the temperature fell distinctly,—a result aided by cold applications. The fall was followed by a sleep undisturbed for six hours. The wandering disappeared; and the amount of albumen was almost nil, and vanished entirely next day. The case progressed favorably; the temperature, pulse, and respiration became normal, the appetite returned, the tongue cleaned, and the spirits revived. The case went steadily on for a fortnight, when suddenly the temperature leaped up to its old place, followed by rise of pulse and respiration, but no albuminuria. This time the alarm created was not so great; but the sudden rise of temperature under the continued use of quinine and digitalis rendered the case still more interesting. There was no evidence of acute indigestion,-a common cause of acute pyrexia, and, on inquiry, it turned out that the pyretic conditions cor-

responded to the menstrual weeks of the catamenial cycle. During the week the second pyretic attack passed away, leaving the patient convalescing very satisfactorily.

There are several lessons taught by this case: (1) always to fight the patient all along the line without despairing, especially in the absence of actual demonstrable disease which must almost of a certainty be fatal; and (2) that we know little of the disturbances which really are part of the catamenial cycle, when this has apparently been abolished by preg-nancy and lactation. That the patient took forty-eight hours for the full action of the quinine and digitalis to be manifested is probably due to the advanced condition she had reached before these antipyretics were resorted to. The albumen in the urine, which was the chief cause of the gloomy prognosis formed, disappeared as soon as the circulation was steadied by the digitalis, and was probably due to congestion of the renal venules. The whole case is instructive in many ways, none the least being the fact of the value of knowing something about a patient's family history. There are families whose members will only succumb to the onslaught of organic disease, and even then only after a protracted resistance; there are others who go down unresistingly under conditions of slight disturbance. Finally, we have yet much to learn about the different conditions under which albuminuria is manifested, and according to which opium must be withheld or may be exhibited. It is notorious that it is the gouty kidney in which opium is so distinctly contra-indicated; yet there are such cases where opium is well borne, and one case is known to me where a pronounced gouty state did not prevent the patient from a decidedly free indulgence in Battley's sedative without any apparent ill effects. J. MILNER FOTHERGILL.

# PROCEEDINGS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF PHILADEL-PHIA.

THURSDAY EVENING, FEBRUARY 13, 1879.
THE PRESIDENT, Dr. H. LENOX HODGE, in the chair.

(Continued from page 366.)

Recurrent round-celled sarcoma of the breast, By S. W. Gross, M.D.

A SPINSTER, at the age of 49, perceived a small, hard nodule in the right mamma, which grew rapidly, ulcerated, and discharged a large quantity of bloody fluid, but the ulcer subsequently closed. It was mobile, bulky, and annoying from its size and weight, and when removed, along with the entire breast, at the end of two years, by Dr. John Ashhurst, Jr., who reported the case in the fifth volume of the "Transactions," p. 230, it was surrounded by a distinct capsule, and sent a prolongation

beneath the pectoral muscle. It was a vegetating or intracanalicular sarcoma, and presented "in alternating preponderance rounding and fusiform cells." Dr. Ashhurst informs ing and fusiform cells. me that the patient left the hospital in a few weeks, with the wound united, and in apparently good health. She returned, however, in four months with a recurrence of the disease on the side of the chest below the axilla, but the tumor was so diffused and so adherent that further interference was not deemed advisable. On her admission into my ward of the Philadelphia Hospital, February 3, 1876, or rather more than nine months after the extirpation of the breast, she was quite corpulent but exhausted from the combined effects of the inhalation of the highly-offensive odor of the open mass, and a profuse hemorrhage which had occurred six days before. She also suffered from constant nausea, and vomiting of the ingesta; the right arm and the lower extremities were cedematous, and the face was decidedly yellow.

On the side of the chest, and extending

over its anterior wall, and reaching to the summit of the axilla, was a foul, excessively fetid, undermined ulcer, filled with gangrenous-looking tissue. Its edges were ragged, but neither thickened nor indurated. Immediately below this, and separated from it by a bridge of skin, was a second but much smaller opening, and to the inner side of and below the latter there was a moderately firm, elastic tumor. At the midpoint of the axilla, as well as below it, were small ulcers, and commencing below its anterior fold were four tubers, each about an inch in diameter, which surrounded the large ulcer on its inner side, and were ulcerated at their centres. The skin in the vicinity of the openings was livid, but

the veins were not prominent. These features are well exhibited in the specimen, which was removed after death, on the fourth day after her admission. The axillary lymphatic glands were not compromised; the vessels were surrounded by the soft material of the growth, but their lumina were free from invasion; the upper four external intercostal and the third and fourth internal intercostal muscles were the seat of extensive deposits, while the parietal pleura over the fifth, sixth, and seventh ribs and their corresponding interspaces was also occupied by small nodules. The right pleural sac was the seat of recent adhesions, and contained half a pint of serum, while the left contained two ounces of fluid. The lungs, the heart, the brain, and other viscera were healthy, except the liver, which was very fatty, and the gall-bladder was distended, the left kidney, which was cystic, and the right kidney, in which were many calculi, which varied in size from that of a French pea to that of a small bean,

Minute examination disclosed that the recurrent growth was a small round-celled sar-

coma, containing some giant elements, and the absence of glandular structure afforded conclusive evidence that the entire breast had

been removed by Dr. Ashhurst.

Dr. John Ashhurst, Jr., said that his experience led him to agree with the opinion expressed by Dr. Gross, and that he regarded these cysto-sarcomas of the breast as more malignant than any other variety of mammary tumor. Besides the patient, the termination of whose history Dr. Gross had just communicated to the Society, Dr. Ashhurst had operated upon another patient similarly affected. This was a colored woman, aged 40 years, suffering from an enormous tumor of the breast, the appearance of which was figured in the last edition of Dr. Ashhurst's "Surgery;" the weight of the tumor, after removal and after the evacuation of three very large cysts, which burst during the operation, was six pounds. The wound healed rapidly, but in a few weeks a small recurrent nodule was formed, not, however, involving the cicatrix, and was removed through a small incision. In about six months the patient again presented herself with multiple recurrent growths, but no operation was now considered advisable. She then fell into the hands of an irregular practitioner, and died not long afterwards, the duration of life after the first operation having been six weeks less than one year. Through the carelessness of an assistant, the tumor was unfortunately lost before it had been submitted to microscopic examination, but Dr. Ashhurst had no doubt that it was a sarcoma, probably of the round-celled or small spindle-celled variety. The clinical histories of these two cases certainly showed a degree of malignancy rarely equalled in any example of mammary car-

Gangrene of the lung from embolism (?) fol-

lowing puerperal convulsions. Presented by Dr. De F. WILLARD. Mrs. K., æt. 20, seven months pregnant with her first child, applied to me, complaining of severe headache, accompanied with swelling of hands, face, and feet. I found that the pains in her head were accompanied by dizzy sensations, and that she frequently snored at night. The ædema of face was most marked in the morning, but during the day it almost entirely disappeared. Her appetite was good; her bowels regular; but her sleep was unrefreshing. Her strength and general condition, however, seemed good. I found her urine albuminous to the extent of one-half the bulk, and to contain a few large fatty casts.

On the following day, before I had time to put her under treatment, after having complained rather more than usual of her head, but while otherwise feeling perfectly well, and after a hearty dinner and supper, she suddenly, at 101 P.M., fell over in a convulsion, from which she roused in about five minutes, but in half an hour had another. Saw her after the second. Was sleeping, but could be roused. Soon had a third; was accompanied by extreme jerking of muscles of face, arms, and legs; mouth drawn to one side; slight frothing at the mouth; pulse 130; pupils dilated, but movable; breathing stertorous for fifteen minutes succeeding spasm, which

lasted for three minutes.

Administered forty grains chloral, which was vomited; repeated it in ten minutes, and was retained. In one hour gave twenty grains more, and thereafter every two hours. A drop of croton oil to be given every hour. She roused sufficiently only to say that her head ached, but no convulsions appearing for three hours, I left her. The os was flaccid, and would admit easily one finger. In half an hour afterwards the fourth convulsion occurred, followed by others, to the extent of thirteen in the next three hours, her consciousness never

returning between them.

When next seen, her pulse was 170, feeble; skin hot; pupils responding to light; breathing stertorous; entirely incapable of being roused to consciousness; neck of uterus now obliterated, and two fingers could be slightly separated in os; uterine contractions evidenced by facial expression and by bulging of membranes; vagina moist. Had an exceedingly severe convulsion while making the examination, and, with Dr. Curtin's assistance, I at once administered ether to remove all possible sources of irritation, opened the os in twenty-five minutes with Barnes's dilators, and instrumentally delivered a three and three-quarter pound child, which, after long efforts, was made to breathe, and at time of writing is four months old, and is growing nicely.

Not two ounces of blood was lost during the operation, the placenta being even pale. She had no convulsions during the time of delivery, and none subsequently. She remained all day, however, entirely unconscious, giving no heed to all attempts at rousing. The pupils responded readily to light, and she could swallow, but her urine was passed unconsciously. She had now taken five drops of croton oil, and had had two large injections of assafætida and turpentine, but no passage of the bowels had been secured. Her neck had also been blistered.

Next morning, pulse 160, feeble; still unconscious; face bloated; lips and tongue swollen and bloody; pupils normal. Hair has been cut short, and bladders of ice constantly applied. A large injection gave small fecal stool; three pints of dark, highly albuminous urine drawn by catheter contained bloody and fatty casts in small number. Moans, but does not answer questions; sleeps restlessly. At 5 P.M., pulse 140; seems to hear, and, when fully roused, occasionally will articulate slowly, "yes." II P.M., pulse 130; eyes clearer; skin soft; tongue moist;

and now, thirty-six hours after delivery, seems quite intelligent, but unwilling to be disturbed. Ice discontinued. Has been drinking freely of solution of Rochelle salts and of milk. The seventh drop of croton oil has now operated the third time. Has been taking potass. bromid. every two hours in camphorwater.

Everything progressed nicely, her secretion of milk appearing naturally, her whole condition indicating a speedy convalescence, until fourth day, when a severe pain, soon accompanied by friction-sound and impaired respiration, indicated a pleurisy of left side, over lobe. Slight effusion evident next morning, and during day in spite of cups and appropriate treatment of yesterday, progressed rapidly to severe form of pleuropneumonia, the entire left lower lobe being

implicated before night.

Over the lower portion of the chest there was almost complete dulness at first, owing to the slight effusion there present, but at end of week, when seen in consultation with Dr. Curtin, no liquid could be discovered, but the resonance was merely diminished over the whole lung, except in axillary and infra-axillary regions, extending from nipple to scapula, where it was flat; the vocal fremitus and resonance were lost, as well as the vesicular murmur; vocal fremitus and resonance increased over the rest of the lung, and broncho-vesicular breathing, with coarse and fine bubbling râles, everywhere present. Mobility of left side diminished; intercostal spaces apparently normal; apex-beat of heart in normal position. Right side abnormally normal position. Right side abnormally resonant; respiratory murmur exaggerated; mobility increased.

In a few days her expectoration became exceedingly offensive, and whenever she coughed the room was almost unbearable. The odor was a peculiar one, and was so marked that it was noticeable upon entering the front door, a strange, sweetish characteristic being most evident. In fact, this smell was so marked that months subsequently, and twenty-four hours after handling the specimen, I recognized its existence

as an emanation from my hands.

She emaciated rapidly, the crepitus of pneumonia giving way to subcrepitant and these to coarser râles, until all the physical signs, as well as the persistent cough and expectoration, indicated the rapid dissolution of the lung, and in the fifth week she died, albumen and casts having slowly disappeared from her

Autopsy, ten hours after death.—Kidneys large, fatty; pyramids congested; other organs, save lung, healthy; uterus well reduced in size. By percussing the chest, amphoric resonance was elicited over position of former flatness; resonance as elsewhere stated. Left pleural surfaces so firmly adherent as to be only removable by tearing away with fingers, at

some points the parietal subserous connective tissue giving way before the union of the two layers would yield; no liquid effusion, but at upper posterior portion of lower lobe the thin wall of a large abscess gave way, giving vent to several ounces of dark-yellow, excessively offensive pus. The lung was everywhere consolidated, and throughout its entire extent were little depots of pus and of tissue, in various stages of decomposition.

The point above alluded to, however, was the only one at which a large cavity existed.

Dr. Willard remarked that he had detailed the case at length, as it presented several different points of interest. 1st. Pathologically considered, as to whether this pneumonia was embolic in its character, such emboli being the result of the conditions of the blood previous, during, or subsequent to the convul-He was strongly of the opinion that it was of this nature, although the wetting of the bed with the ice, and the occurrence of pleurisy antecedent to the pneumonia, would favor the idea of its production by cold. On the other hand, pneumonia is a very common occurrence in the course of Bright's disease. 2d. The case was of interest from the fact that chloral failed to arrest the convulsions. and in his experience such was frequently the case. 3d. It was the first time that he had been able to deliver a living infant, after such severe spasms, in the seventh month. Erectile tumor from scalp. Presented by Dr.

C. SEILER.

The tumor, of which a microscopical specimen is under the microscope, was removed from the scalp of a young girl by Dr. S. W. Gross; it projected about an inch and a half from the surface of the scalp, being somewhat thicker at the free end, and pointed, resembling in shape a penis. The free end was ulcerating and emitted an extremely offensive odor. The growth had first been noticed six months previous to the operation.

On making a longitudinal section through the tumor, and after staining it with carmine and indigo, it was found, on microscopical examination, to present a picture very similar to that of a longitudinal section of a small penis.

The base was found to be composed of the normal tissue of the scalp, the shank or narrow portion of cavernous or erectile tissue, the meshes of which were lined with endothelium and filled with blood-corpuscles, while the gland-like expansion at the free end showed, at first glance, glandular tissue. A more careful examination, however, proved this tissue to be the same as that of the shank, but with the endothelial cells of the caverns in an active state of proliferation and a return to the fœtal state. The whole of the tumor was covered with a thin layer of epithelium, except at the extreme end, where it had been destroyed by ulceration. By the ordinary processes of staining with one color, the distinction between glandular tissue, and

this cavernous tissue, filled with proliferating cells, could not easily have been made; but by employing the double staining, which colors the nuclei red, while the intercellular substance is tinged blue, and the blood-corpuscles green, it was readily seen that in between the oval cells numerous green blood-corpuscles were impacted.

I have presented this specimen because it shows the value of large sections, and of the double staining process in pathological histology, for, if a transverse instead of a longitudinal section had been made, the true nature of this growth could not have been made

out without great trouble.

# REVIEWS AND BOOK NOTICES.

ON Loss of Weight, Blood-Spitting, and Lung Disease. By Horace Dobell, M.D., etc., etc., Consulting Physician to the Royal Hospital for Diseases of the Chest, late Senior Physician to the Hospital, etc., etc. Philadelphia, Lindsay &

Blakiston, 1879.

"A person who suffers from loss of weight, blood-spitting, and lung disease is generally thought to be in a consumption," says Dr. Dobell, in his preface; and he is quite right. Furthermore, the hideous mortality from pulmonary consumption in that belt of the globe in which the book before us was written and published, and in which it still is on this side the Atlantic, lends to every thoughtful word written upon the subject an interest to the profession which is always, in spite of unnumbered disappointments, fresh and absorb-The long experience of our author in this disease; his painstaking and unwearied research into its clinical phenomena, continued through many years; his opportunities for most extended personal observation; and the earnestness which marks every page he has written, would demand the considerate attention of the profession, were the subject one of far less importance than it is. His book is a most minute and labored study of phthisis from a clinical stand-point: it is illustrated by a table of one hundred selected cases in which blood-spitting occurred, the cases being analyzed with reference to the author's peculiar hypothesis as to the essential pathological processes in that malady in which loss of weight, blood-spitting, and lung disease are frequently associated conditions. What that hypothesis is will be best made known in Dr. Dobell's own words:

"This foe is oxidation,—the yielding up of the tissues to combustion by oxygen, in consequence of a defect in the supply of fats from the food into the blood. Thus the blood becomes deficiently and defectively supplied with fat elements from the food; is unable to afford those required for direct combustion; does not replace those taken up during inter-

stitial nutrition; but, on the contrary, takes up more to compensate the deficient supply from the food. This having gone on up to a certain point, the fat elements of the albuminoid tissues are seized upon, and those tissues are minutely disintegrated in the process; they are, in fact, reduced to ashes.

"It is evident that this disintegration by oxygen will take place first wherever the following combination of conditions coexists in

the most marked degree:

"I. Greatest activity of interstitial oxida-

"2. Smallest amount of fat elements able

to be spared by the tissues.

"3. Oxidation of blood deficient in materials for oxidation, through the medium of tissues also deficient in such materials." (Pp.

The lungs are the organs which, under ordinary circumstances, most markedly fulfil these conditions. Hence it is that when the oxygen in the blood fails to find fat, it turns upon the albuminoid tissues of the alveolar

wall and destroys it.

"This disintegrated albuminoid material is the irritant which, in true tuberculosis, sets up the hyperplasia of adenoid tissue, the cellproliferation, angioplasia, and their results. so well described by Portal, Virchow, Sanderson, Rindfleisch, Charcot, Malassez, and

(P. 168.

And again,—"Those who have taken the trouble to go critically through the preceding pages must have been struck with the comprehensive manner in which the doctrine of oxidation due to defect in the passage of fat into the blood throws light upon all other contending doctrines and observations respecting tuberculosis, tuberculization, and tubercle. while it accounts for clinical facts which they

"I. It accounts for the initial loss of weight and strength, which every other doctrine ig-

"2. It brings into place the loss of weight attendant upon lung disease, but not initial.

3. It accounts for the order in which organs are affected with tubercle at different periods of life.

"4. It accounts for the order in which the

tissues of these organs are invaded.

"5. It accounts for all the elements of the heterogeneous masses called tubercle,—the bone of contention among pathologists of all nations.

"6. It explains the clinical history of pulmonary consumption, from its first symptom

to its last.

"7. It clears up the difficulties, which have so confused and confounded pathologists, as to the local or general origin of pulmonary consumption.

"8. It explains the action of all remedies known to have any appreciable effect upon

the disease." (P. 194.)

If all this be true, Dr. Dobell's claim that his is the best working hypothesis vet presented is surely not an unwarranted one. Yet we cannot, even after a most attentive reading of his book, admit with him that by its simplicity of conception and universality of application it "proves itself."

Simplicity of conception is certainly a noteworthy character of the hypothesis, when we seek the fontem et originem mali,—the explanation of the absence of the proper supply of fat in the blood,—and find that it is due to "defect in the action of the pancreas and of its coadjutors, the intestinal glands and the

liver." (P. 195.)

The principle upon which to base treatment is obvious, but is it to be hoped that phthisis would be "stamped out" by the introduction of the "Pancreatic Emulsion" as a staple article of our daily bread? Of course all consumption is tubercular under this hypothesis, which has no place for the inflammatory forms. Indeed, the doctrine of inflammation is most strenuously opposed.

The book is very well worth careful reading. It abounds in valuable facts connected with consumption, arranged and read at times arbitrarily perhaps, but almost always suggestively. That it will be an "epoch-making" contribution to the literature of the subject is

doubtful.

The lithograph, from a drawing by Dr. Mexon, which serves as a frontispiece, is an excellent piece of work. J. C. W.

A GUIDE TO THE QUALITATIVE AND QUANTI-TATIVE ANALYSIS OF THE URINE. C. NEUBAUER and Dr. J. VOGEL. lated from the Seventh German Edition by Elbridge C. Cutler, M.D. Revised by EDWARD S. WOOD, M.D.

"The child whom many fathers share Hath seldom known a father's care."

Nevertheless, polyandry or multiple paternity seems in the present case to have been an eminent success. The book is certainly the best in the language upon its subject, and presumably the best in any language. Of course the word "best" here is used in a restricted sense, meaning fullest and most complete, along with the possession of other good qualities. For the physician who wants simply practical knowledge, easily acquired and of immediate utility as a weapon against disease, the smaller manuals, led by the work of Dr. Tyson, are perhaps preferable to this larger one. The work of Drs. Cutler and Wood has been very satisfactorily performed. In print, illustrations, and binding, the volume is almost sumptuous, ranging in its mechanical attributes to an extreme distance from some of the other doings of its publishers.

PRACTICAL INSTRUCTION IN ANIMAL MAG-New York, S. R. Wells & Co., NETISM.

To any of our readers who are desirous of knowing how by the throwing out of personal force into the sick, to heal fistula, arrest pleurisies, disperse quinsies, put to flight malignant fevers, and assert in general a godlike supremacy over disease, we commend this volume; to all who are so incredulous that they will not believe a thing because it is printed, so besotted in their prejudices that they will not attempt miracles, so given over to the abominations of drugs that they will continue to use them, we say, this book is not for you.

DISEASES OF THE ABDOMEN. By S. O. HABERSHON, M.D. Third Edition. Philadelphia, Lindsay & Blakiston, 1878.

ON DISEASES OF THE ABDOMEN. By S. O. HABERSHON, M.D. Second American from the Third London Edition. H. C. Lea, 1879.

We apparently have, in the two works before us, an instance of a transaction which is of great psychologic as well as commercial interest. It illustrates how law influences morality almost as much as morality does law. Few honorable men could reconcile to their consciences and self-respect the appropriating of their neighbor's house, even if the word neighbor did have to be so stretched as to include an owner across the broad Atlantic. Few honorable men (or perhaps we should say publishers) are to be found who have any scruples whatever in appropriating the property of their neighbor, if, instead of being a house the reward of labor by day, it is a book the reward, it may be, of labor by night. The reason of this, evidently, is demoralization through law. It will be a long time before public opinion (which yet forbids the public use of the word stealing) corrects by itself either the law or the practice; but now that, through the intricate operations of commercial relations, at least one of the most all-devouring storks has begun to come to the aid of the frogs, authors may reasonably hope to see a just copyright law. If this be accomplished, we will cease to see at one time. on our book-table, an imported English work upon whose title-page has been placed the imprint of an American publisher, and an American reprint of the same. We are glad to be able to say that the English book is in every way superior to the American. We would fain wish, by virtue of this mechanical superiority, if by no feeling of justice, that the American medical profession would be led to buy the volume of Lindsay & Blakiston.

Concerning the scientific and medical attributes of the book it is not necessary here to enlarge, since the work is an old and well-known favorite with the profession.

Lessons in Laryngoscopy, including Rhinoscopy, etc. By Prosser James, M.D., M.R.C.P., etc. London, Baillière, Tindall & Cox, 1878. 12mo, pp. 176.

Dr. James's little book is one which may be recommended to the general practitioner de-

sirous of obtaining a practical acquaintance with the diagnosis and treatment of diseases of the nares, pharynx, and larynx. It gives a brief but clear account of the parts to be examined in their various relations, the instruments employed in examination and for the purposes of treatment, and the method of using these instruments. In addition, the various remedies used, electrolysis, caustics, gargles, fumigations, etc., are described. Except incidentally, Dr. James does not touch upon the various diseases, which, indeed, would take him outside of the natural limits of his work. The book is profusely illustrated with coarse but serviceable wood-cuts. Half a dozen carefully colored plates of the laryngeal image in various affections are appended.

# GLEANINGS FROM EXCHANGES.

INTERMENINGEAL SPINAL HEMORRHAGE SIMULATING STRYCHNINE-POISONING.—E. L. Dixon, M.D., was sent to see a man 49 years of age, of intemperate habits, who had been suddenly seized with violent tetanoid convulsions, which continued to recur at short inter-The body, in a paroxysm, became completely extended, with the neck, arms, and legs stretched out and stiff for a short time. Comparative relaxation then took place, to be followed in two or three minutes by a return of the spasms, during which the patient, who was never unconscious, screamed from the pain which he said he experienced all over the body, but especially in the region of the heart. The least touch brought on a spasm. Pulse, 74, of good volume; the pupils during a paroxysm not insensible, but somewhat sluggish and dilated. The patient died within two hours. Post-mortem examination proved the absence of poison from the viscera. On examination, the spinal arachnoid cavity was found filled with coagulated blood; there was no opening of aortic aneurism into the canal. Want of time prevented search for the ruptured vessel. The case is interesting from a medico-legal point of view, tetanus being the only disease mentioned as very likely to be confounded with strychniapoisoning.—Lancet, vol. i., 1879, p. 333.

LAPAROTOMY FOR ACUTE INTESTINAL OB-STRUCTION AND REMOVAL OF GALL-STONE IMPACTED IN ILEUM.—Mr. Bryant reports the case of a woman of 50, who had suffered three days from symptoms of acute intestinal obstruction. The chief seat of pain was a little to the left of the umbilicus. Mr. Bryant made an incision for about four inches vertically downwards from the umbilicus, and some claret-colored and ecchymosed coils of intestine appeared at the wound. These were traced up and down until a part was reached where a hard body was found impacted. An incision was made on this, and a gall-stone extracted of two hundred and eighty-three grains in weight and the size of a small hen's-The patient, however, never rallied, and died eight hours later. Mr. Bryant urges early operation in intestinal obstruction.

-Lancet, vol. i., 1879, p. 336.

PEMMICAN.—The Lancet recommends this preparation as a substitute for the various preparations of raw beef employed as peculiarly nutritious. Pemmican contains 35 per cent. of albuminates, 53 per cent. of fats, and yields per ounce 275 foot-tons of energy, as compared with dried bacon, 8 per cent. albuminates, 73 per cent. fats, 291 foot-tons, and with lean meat 20 per cent, albuminates, 35 per cent. fats, 55 foot-tons energy. It has also nearly double the force-value of oat-meal, which is considered as a typical article of nutritive food. Unfortunately, it has a disagreeable taste, due, probably, to the oak saw-dust used in preparing it. Pemmican is also pro-cured only with difficulty.

RARE FORM OF INTESTINAL OBSTRUCTION-OPERATION—CURE.—At a recent meeting of the London Clinical Society, Mr. Bellamy read notes of a case of rare form of intestinal obstruction, due to invagination of the small intestine in the first part of the rectum; gas-The patient was a pale, trotomy; recovery. delicate woman, aged 34, who came under care on February 16, 1879, with symptoms of obstruction of nine days' standing. She had an inguinal hernia on the left side, for which she wore a truss, which was left off a short time previously. She was subject to habitual constipation, and on three occasions the retention of fecal matter had given rise to very serious symptoms, which, however, always yielded to ordinary measures. On admission, a hard swelling was felt in the left iliac fossa in region of inguinal canal and sigmoid flex-There was intense pain over lower part of abdomen, and her eructations smelt stercoraceous. On examination of rectum by the entire hand, under chloroform, Mr. Bellamy found that he could not get his fingers past the lower end of the sigmoid flexure, and that it seemed to be filled up and constricted by some intra-abdominal stricture or protrusion through the separated softened muscular fibres of the rectum. Deferring operation for a time, the patient became much worse, vomiting stercoraceous, and on the evening of the 17th Mr. Bellamy proceeded to operate, under strict antiseptic precautions. Thinking there might be some involution of small intestine, perhaps through hernia into rectum, as mentioned by Linhart, or a hernia reduced en masse, he cut down on the external ring, exposed it, and, passing the finger into inguinal canal, found no gut there, but felt the sigmoid flexure greatly distended. Then, enlarging the opening, and introducing the entire hand into abdominal cavity, he found the posterior uterovesical fold of peritoneum greatly developed, and also a bundle of small intestine lying below it and tucked into the anterior wall of the rectum. In addition to this, he felt what appeared to be bands of organized lymph stretching across the first part of rectum, probably due to some earlier inflammation in the same locality, rendering reduction per anum impossible. Again, with the entire right hand in the rectum and the left in the pelvic cavity, he broke down adhesions, and, by gradual manipulation, reduced the prolapsed bowel. Very shortly after, flatus escaped, and within twelve hours a most copious evacuation occurred, affording immense relief. The patient progressed favorably until the 22d. and had not a bad symptom of any sort; but some delirium came on, and she tore off her antiseptic dressings. The delirium was, however, subdued by subcutaneous injection of morphia and by chloral, and at the time of the meeting the wound was looking quite healthy, and she was out of danger.-Lancet. vol. i., 1879, p. 337.

DEFORMITIES IN THE YOUNG THE RESULT of Methods of Education.—Dr. Buckminster Brown calls attention to the prevalence among young people of both sexes of scoliosis, or "retro-lateral curvature of the spine," as a result of bad positions in writing, drawing, at the piano, etc., also while standing during recitations and carrying heavy books, etc., on one arm. This result is not only due to malposition, but also to too long continuance in one position, even if originally a good one. Dr. B. mentions as examples the faulty positions almost always assumed by children when writing at a desk, standing on one leg during recitations, etc., also horseback-riding in the unnatural position assumed by women. The remedy lies in frequent changes of posture and careful adaptation of desks, pianostools, etc., to the positions which are to be assumed by the child.—Boston Med. and Surg. Journ., 1879, p. 281. A TOOTH-PICK IN THE LIVER.—Dr. Kraus

(Brit. Med. Jour., 1879, p. 323; from Allg. Wien. Med. Zeitung) states that he saw, at the necropsy of a man who had died of phthisis, a tooth-pick nearly four inches long and pointed at both ends, taken from the liver. The man had been addicted to drink. At the anterior surface of the left lobe of the liver, an abscess of the size of a walnut was found. The posterior surface of the colon was adherent to the liver at this part; and on careful examination a fistulous opening communicating with the abscess was found in it. On laying open the abscess the tooth-pick was

disclosed.

CHRONIC CHOREA TREATED WITH HYPO-DERMIC INJECTIONS OF CURARA TOGETHER WITH LARGE DOSES OF SULPHATE OF ZINC.-Dr. Day (Lancet, vol. i., 1879, p. 265), in a case of chorea in a young girl where iron, bromide of potassium, arsenic, and the juice of conium had failed, gave hypodermic injections of  $\frac{1}{30}$  to  $\frac{1}{10}$  gr. curara in the form

of a small gelatin disk; impregnated with the drug and dissolved in water. In addition, sulphate of zinc was given in three-grain doses twice daily, increasing by one grain daily until eighty grains had been taken in a single day, without causing the slightest sickness or discomfort. Under this treatment the patient recovered.

KOUMYS FOR YOUNG INFANTS .- Dr. P. Brvnberg Porter recommends koumys as a food for very young infants unable to digest cow's milk or the ordinary substitutes for mother's milk. It should be freed from carbonic acid and given cold. Children usually take to it kindly. One and a half to two pints daily may be given to children of three or four months. Koumys, as sometimes prepared, contains unmodified casein and milk sugar, which entirely obviate its good effects. To ascertain in a given case if the casein is coagulable, add dilute hydrochloric acid, and if this precipitates the casein the mixture has not been properly prepared. To ascertain if the milk sugar has been destroyed, boil, and fill a testtube with the liquid; then add a little yeast, and invert the tube in a saucer of water, as in the fermentation test for sugar in urine, when any fermentation taking place gives evidence that the mixture has not been properly prepared.-New York Medical Journal, March, 1879.

WHOOPING-COUGH. — Dr. J. J. Caldwell's mode of treating these cases is to place a steam atomizer in position on a table before the patient, charged with the following mixture:

R Ext. belladonnæ fluid., gtt. vi-xii; Ammonii bromidi, Əi; Potassii bromidi, Əij; Aquæ destillat., f3ii.—M.

This spray is rapidly carried over into the face, mouth, and lungs of the child, and applied ten to fifteen minutes, until the pupils are dilated by the effects of the belladonna mixture; the application to be made morning, noon, and bedtime. This has, so far, cut short the spasmodic cough within two or three days uniformly, and almost to a certainty.—

St. Louis Med. and Surg. Jour., 1879, p. 192.

A PECULIAR CONDITION OF THE SKIN IN PARAPLEGIA. — Dr. David Ferrier has observed that when certain metals, as silver, gold, copper, lead, zinc, etc., are rubbed upon the skin of paraplegic persons, black marks are induced; the same metals rubbed upon the unaffected portions of the skin produce no such marks. With a clean silver probe, letters, or even a sketch, can be made upon the skin. Dr. Ferrier believes the property of taking on markings, under these circumstances, is connected with an ædematous condition of the skin.—British Medical Journal, 1879, p. 341.

1879, p. 341.

LEAD-POISONING. — Dr. Edelmann, in his Thèse de Paris, discusses a few little-known causes of lead-poisoning. Of four cases enumerated, three occurred respectively in a

workman employed in making bullets, in a hair-dresser who dyed hair, and in a man who had been employed in making ice-cream. The fourth case was that of a woman engaged in polishing cameos, whose symptoms are detailed in the *British Medical Journal*, vol. i.,

1879, p. 357.

PHOSPHORESCENT MEAT. — Dr. Neusch, called to his household pantry by a cry of alarm from the domestic, observed that a dozen pork-chops which were lying in a dish illuminated the whole place, shining with a phosphorescent light sufficient to enable the minutes and seconds to be distinguished on the face of a watch. It was found that this phosphorescence was due to minute bacteria. All the meat in a certain butcher's shop, from which these chops had come, was thus affected for several weeks. The same phenomenon has been met with occasionally before: in 1592, at Padua, when it was described by Fabricius ab Acquapendente; once in Austria; and a third time, in 1868, in Berne, and in Heidelberg, in the dissecting-room of the University. — British Medical Journal, 1879,

P. 357.
YERBA SANTA AS A MEANS OF DISGUISING THE TASTE OF QUINIA.—Henry M. Kier, M.D., recommends yerba santa, in the form of elixir or syrup, as a palatable vehicle to disguise the taste of many bitter drugs. The salts of quinia, given in the proportion of ten to twenty grains to the fluidounce of one of these preparations, are rendered palatable, or, at least, tolerable. The yerba santa leaf imparts to quinine the taste of starch, when chewed and held upon the tongue for a second.—Pacific Medical and Surgical Journal,

March, 1879.

HYDROBROMIC ACID is still on trial as a sedative neurotic, and as a substitute for the alkaline bromides. An objection to its use is that it must be largely diluted. A dose of 50 grs. (41.6 minims) of Squibb's solution—equivalent to 25 grs. bromide of potassium—requires not less than f3viij of liquid containing at least an ounce of sugar in solution. Dr. Fothergill, however, gives it in smaller doses, and esteems it highly in irritable cough, etc.

SPASM OF THE CILIARY MUSCLE TREATED BY DUBOISIN .- Dr. Soelberg Wells, in a communication on this subject in the Lancet (vol. i., 1879, p. 223), says he had so frequently found atropine setting up irritation before completely paralyzing the muscle of accommodation in spasm of the latter, that its use had in many instances to be desisted from. Duboisin acts more rapidly and powerfully than atropine, a four-grain solution dilating the pupil more rapidly and acting more on the muscle of accommodation than a solution of atropine of equal strength. The pupil in a normal eye becomes dilated ad maximum in ten to twenty minutes, the accommodation (if there is no spasm of the muscle) paralyzed in twenty to forty minutes; this lasting for three or four days.

Pyrogallic Acid as an Antiseptic.—In a recent number of the Lyon Médical (Brit. Med. Jour., 1879, p. 278) Dr. Bovet calls attention to the antiseptic properties of pyrogallic acid. His conclusions are as follows: I. A solution of pyrogallic acid of I or 2 per cent. prevents for some months the development of odors and of microscopic organisms. 2. A solution of 2½ per cent, removes the odor from fluids in a state of putrefaction, and destroys the bacteria. 3. A solution of 3 per cent. renders motionless and kills all the elements of the bacilio subtilis. 4. Pyrogallic acid prevents alcoholic fermentation and the formation of mould. 5. A 2 per cent. solution may be applied to man without injury, and is a very good disinfectant. The acid, however, blackens steel instruments, and these stain the hands; the stains, however, may be removed by oxalic acid, and the instruments may be cleaned by washing them in a concentrated solution of soda.

PHYSIOLOGICAL ACTIONS OF ACONITE AND ACONITIA.—G. Hunter Mackenzie has arrived at the following conclusions as the result of

experimental research:

1. Aconite and aconitia act primarily on the respiration by their influence on the respiratory centre and peripheral sensory branches of the vagus.

2. They have no direct action on the heart, and only affect that viscus secondarily, through

the medium of the lungs.

3. Their action on the nervous system consists in, first, irritating, and secondly, paralyzing, the peripheral sensory nerves and posterior roots of the spinal nerves. They have no direct action on the brain or the vasomotor nerves. They increase the irritability of the peripheral motor nerves and of the motor columns of the cord.

4. They do not induce muscular paralysis, but, on the contrary, increase the irritability

of voluntary muscle.

5. They induce convulsions mainly through their augmenting the irritability of the anterior column of the cord, the motor nerves, and muscles.

6. They first increase, and secondly di-

minish, temperature.

7. Death ensues from asphyxia and respiratory collapse.—*Practitioner*, March, 1879.

QUINIA IN TENESMUS OF THE NECK OF THE BLADDER.—Dr. Simmons, of Yokohama (Med. Times and Gaz., 1879, p. 218), has given quinia in doses of ten to fifteen grains by the mouth in cases of persistent and painful tenesmus of the bladder, with very beneficial results.

PREVENTION OF IRRITATION FROM TRUSS-PADS.—A correspondent of the *British Medical Journal* advises having loose covers of the finest and softest wash-leather made, which can frequently be changed and dried; this combined with daily ablutions with boracic acid-water, the writer states, kept his patients free from all discomfort.

# MISCELLANY.

OBITUARY RECORD.—Dr. Isaac Hays, who died April 12, aged 83 years, was educated at the University of Pennsylvania, taking his

A.M. in 1815, his M.D. in 1820.

In February, 1827, Dr. Hays joined the editorial staff of the *Philadelphia Journal of the Medical and Physical Sciences*, which in November was rebaptized as the *American Journal of the Medical Sciences*. Dr. Hays became its sole editor, and for over half a century it remained under his control. In 1843 the *Medical News* was commenced as a monthly in connection with the *Journal*, and in 1874 the *Journal* was further supplemented by the issue of the *Monthly Abstract of Medical Science*, under the same editorial supervision.

In 1828, Dr. Hays edited an edition of Wilson's "American Ornithology," 3 vols. 4to; in 1831 he published a translation, made in connection with the late Dr. Robert Egglesfield Griffith, of Broussais "On the Phlegmasiæ," 2 vols. 8vo; in 1834 he edited the "American Cyclopædia of Practical Medicine and Surgery," 2 vols. 8vo, and was the author of a number of the articles contained in it; in 1846 he edited Hoblyn's "Dictionary of Medical Terms;" in 1848, Arnott's "Elements of Physics;" and in 1847, Lawrence's "Treatise on Diseases of the Eye," with numerous additions, which passed through three editions. He contributed to the "Proceedings of the Academy of Natural Sciences," and to the "Transactions of the American Philosophical Society," and he was also the author of a number of articles published at various times in the American Journal of the Medical Sciences.

Dr. Hays, in addition to his literary labors, always performed a fair proportion of practical work. He was almost the first person to attain eminence as an ophthalmologist in Philadelphia, and from the organization of Wills Hospital, in 1834, until his resignation, in 1854, was a very active member of its staff.

In the various medical societies of the city, Dr. Hays was an honored and active member; his urbanity, his unblemished reputation for the strictest impartiality, and his long experience, gave great weight to his opinions upon disputed ethical points and in personal difficulties between members of the profession. He was prominent in the organization of the American Medical Association and of the Pennsylvania State Medical Society. He was the first Treasurer of the Association, and chairman of its committee which framed and reported its Code of Ethics, which has since been adopted by every medical society in the Union and is regarded abroad as a standard of professional conduct.

ORIGINAL METHOD OF REMOVING FOREIGN BODIES FROM THE NOSE.—Dr. Convert, in the Atlanta Medical and Surgical Journal,

says he has seen a negro "operate" as follows in the case of a boy who had an im-He pressed the pacted berry in the nostril. unobstructed nostril with his finger to prevent escape of air, his open mouth covering the whole of the boy's mouth, and first "blowing him up," then with a sudden puff brought out the berry like a wad out of a pop-gun.

AFFECTING. — A Southern valedictorian closes with the following peroration: "Let us remember, always, that hearts had ne'er been supernal, without a world to brave; and when life's leaves shall wither, may we have gathered many gems of virtue; and when the bloom of life's coronal has faded, may we weave living circles around immortality. Till then, my class-mates, though the leaflets of memory hang dripping with tears while we speak the word,—yet we, too, must say, farewell!"

Naïr.—The following advertisement appears in the columns of a German medical contemporary: "Through the death of the late proprietor, a good practice (surgery) in a wealthy part of the country is to be disposed of, either by sale or lease. The present owner, daughter of the deceased, is young and single, and would not object to marriage with the buyer or tenant, if suitable arrangements were made. Ad-

dress, etc.

COFFEE AND EGG FOR SICK PERSONS.—It is said that life can be sustained by the following when nothing else can be taken. Make a strong cup of coffee, adding boiling milk as usual, only sweetening rather more; take an egg, beat yolk and white together thoroughly; boil the coffee, milk, and sugar together, and pour it over the beaten egg in the cup you are

going to serve it in.

The latest publication of William Wood & Co., of New York, in their Library of Standard Medical Authors, is the classic work of Professor Frerichs on Disease of the Liver (Murchison's translation). The book is, of course, a very old one, having been written in 1858, but it is of such character that for half a century it will remain a classic. As to the extraordinary cheapness of the issue

there can be no question.

ORIGIN OF DIPHTHERIA. — Diphtheria is believed to have originated in Egypt more than two thousand years ago. It prevailed in Egypt and Asia Minor, to which it ex-tended, during the first five hundred years, and hence was early called an Egyptian or Syriac disease. Having invaded Europe, the disease appeared in Rome A.D. 330, and, being highly contagious, in its fifteen hundred years' transit on the continent of Europe it affected mainly rural districts and garrisoned towns. It extended to Holland, in which it was epidemic in 1337; to Paris in 1576, and again appeared there in 1771. It prevailed more extensively in France in 1818 and 1835, and in England, the United States, and Canada from 1856 to 1860, and more or less ever since.

# NOTES AND QUERIES.

Dear Sir,—I am preparing for the American Laryngological Association a report of what has been published in this country on Laryngology and allied subjects, and shall appreciate it as a favor if you will inform me of the title and publication of everything you have written on the subject of the Throat, Voice, etc. If you can send me a copy of the article itself, so much the better. If either long ago or recently anything has been published by some one else, which in your judgment would be likely to escape my attention, no matter how unimportant it may seem, please mention it in your answer. vour answer.

Sincerely yours, Louis Elsberg, M.D.

614 FIFTH AVENUE, NEW YORK.

#### EDITOR OF PHILADELPHIA MEDICAL TIMES:

Permit me to express satisfaction with your timely remarks on "Conservatism of Philadelphia Medicine," and also to call attention to a mistake, somewhat analogous to what you have referred to, in the same number of the Times (April 26, page 63). Either the reporter or Dr. O'Hara has there, unitentionally no doubt, done a not unimportant injustice by misquotation. Hemorrhagic sputa are there said to be "a fatal symptom, according to Hartshorne." Supposing the reference to be to my "Essentials," the words therein used (4th edition, p. 166), on the subject of the prognosis of pneumonia, are these: "Among the unfavorable signs, most of which are obvious, are expectoration of pure blood in the first stage, and albuminuria in the second." Not a word occurs like asserting "hemorrhagic sputa" at any stage to be a "fatal symptom." That they are such I do not at all believe; while I must continue to differ from those who think that "expectoration of pure blood" in a case presenting the distinct characters of pneumonia is a "favorable" symptom.

Very respectfully,

Henry Hartshorne.

### OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY FROM APRIL 20 TO MAY 3, 1879.

Surgeons J. J. Woodward, J. S. Billings, and W. H. Forwood, and Assistant-Surgeon R. M. O'Reilly were designated to represent the Medical Department of the Army at the annual meeting of the American Medical Association, at Atlanta, on May 6. S. O. 97, A. G. O., April 23, and 99 of April 25, 1879.

STERNBERG, G. M., MAJOR AND SURGEON.—Relieved from duty in Department of the Columbia, and to report in person to the Surgeon-General for temporary duty. S. O. 95, A. G. O., April 19, 1879.

GIRARD, J. B., CAPTAIN AND ASSISTANT-SURGEON. — Assigned to duty as Post-Surgeon at Fort Davis, Texas, relieving Assistant-Surgeon Woodruff. S. O., 83, Department of Texas, April 21, 1879.

HALL, J. D., CAPTAIN AND ASSISTANT-SURGEON.—Assigned to duty at Fort Griffin, Texas, relieving Assistant-Sur-geon Powell. S. O. 83, c. s., Department of Texas.

Woodruff, E., Captain and Assistant-Surgeon. — Assigned to duty as Post-Surgeon at Fort Stockton, Texas, relieving Assistant-Surgeon Hall. S. O. 83, c. s., Department of Texas.

Brown, P. R., First-Lieutenant and Assistant-Sur-Geon.—Relieved from duty at Fort Shaw, and assigned to duty at Fort Bennett, D. T. S. O. 39, Department of Dakota, April 22, 1879.

Merrill, J. C., First-Lieutenant and Assistant-Sur-GEON.—Assigned to duty at Fort Shaw, M. T., relieving Assistant-Surgeon P. R. Brown. S. O. 39, Department of Dakota, April 22, 1879.

Powell, J. L., First-Lieutenant and Assistant-Sur-GEON.—When relieved, to report in person at these headquarters for further orders. S. O. 83, c. s., Depart-ment of Texas.

# PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, MAY 24, 1879.

# ORIGINAL LECTURES. CLINICAL LECTURE ON SCROFULODERMA.

Delivered at the Hospital of the University of Pennsylvania BY LOUIS A. DUHRING, M.D.,

Clinical Professor of Diseases of the Skin.

Reported by Dr. Arthur Van Harlingen, Chief of the Skin Clinic,

GENTLEMEN,—We may with profit, I think, devote a portion of the hour to the consideration of scrofuloderma, of which the case before us is an example. This woman illustrates one form of scrofula of the skin, the several other varieties of scrofuloderma being much less frequently met with. Her history is as follows:

She is of Irish birth, 37 years of age, is married, and the mother of nine children. Five of these are dead from affections in no way connected with her present disease. and four are living and healthy. She herself has always enjoyed good health up to within the last three years. At this period she suffered with a severe cold and sore throat, which was followed by the enlargement of a gland at the right side of the neck, near the clavicle. This "kernel," as it was called, at first was no larger than an almond, and quite movable under the skin. It grew slowly, however, until it reached the size of a small hen's egg; became filled with fluid; broke, and discharged slightly; and then healed over spontaneously, leaving a scar. A little later another enlarged gland appeared, this time on the left side of the neck, and this followed the same course as the first, growing slowly in size up to a certain point, then softening, discharging for a while, and healing up with a red, knotty Other enlarged and inflamed glands have since shown themselves in the cervical region, appearing one after another during the past year or two, and becoming more and more frequent and severe, es-The disease has never pecially of late. shown itself in any other part of the body. We note her present condition as follows:

The affection is confined to the cervical and clavicular region. It consists of a number of irregular, funnel-shaped, deeply-depressed, violaceous cicatrices, situated about the rami of the lower jaws on both

sides, arranged in an irregular line down along the sterno-mastoid muscle, together with a few about the thyroid region. Most of these irregularly linear cicatrices are bossillated, and several contain abscesses or are covered with vellowish crusts. There are three lesions, however, in a more actively diseased condition. One of these is a deeply undermined, irregular, unhealthy ulcer, oval, and about an inch in long diameter and half an inch deep. surrounded by a smooth border of violaceous, infiltrated integument, not raised above the skin generally. This is below the right clavicle. On the edge of the sterno-mastoid, just back of this, is a smaller, large-pea-sized ulcer, similar in character, but containing a crusted slough, which is just beginning to separate. On the upper border of the left clavicle is an abscess the size of a pigeon's egg and ready to break, surrounded by a violaceous areola. A small ulcer appears to be forming above the head of the sternum. The patient complains of poor appetite and of impaired general health; she is gradually losing strength.

The case is a typical one, and the picture must impress itself on your minds more forcibly than words can do. Scrofuloderma merits attention on account of its importance, its chronicity, and the disfigurement of the person which it in time causes by its ravages. And although, unfortunately, we do not know very much about its true nature, yet it deserves careful study and the attempt to treat it to the

best of our ability.

From the frequency with which we hear of scrofuloderma, and meet with accounts of cases of so-called scrofula of the skin, it might be thought that the affection is one of common occurrence; this, however, is far from being the case, for our experience, both in this clinic and in the Philadelphia Hospital, indicates that the manifestation is by no means common. I speak, of course, of scrofula as it attacks the skin, and not of general scrofula, nor of glandular disease. From the history of this case, scanty as it is, many of you would know or suspect the character of the affection. If you look in the textbooks to learn something about scrofuloderma, you will become perplexed; or if you converse upon the subject with members of the medical profession, you will

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find the most varied and confused notions existing; for the subject is an obscure one. I cannot direct you to any book or monograph which gives a clear idea of the affec-Most usually it is confounded with lupus vulgaris, or with syphilis inherited or acquired; but scrofuloderma is, I think, a distinct disease, and is to be clearly distinguished from these others. Such is the view taken by most dermatologists.

The form of scrofuloderma here presented is that most frequently met. disease is, as we have seen, associated with scrofula of the lymphatic glands, but the cutaneous lesions, apart from the glandular involvement, entitle it to our especial consideration. It is possible that the disease began in the lymphatic glands, which became engorged, filled with a cheesy deposit, then suppurated and broke down, and, involving the integument covering them, opened, forming ulcers pouring forth a puriform secretion. But the patient gives so confused a history of the occurrence of the various lesions, that this view may not be correct, and the sequence of the lesions may have been otherwise. is, in fact, impossible to say if some of the lesions-notably that one pointed out as existent below the right clavicle—may not have originated in the skin and worked down, while others have manifestly originated in the lymphatic glands and worked out into the overlying integument and to the surface.

There are several varieties of scrofuloderma: I. That in which the disease begins in a lymphatic gland, which slowly enlarges; gradually breaks down; softens; becomes purulent; forms an abscess; and, sooner or later, discharges. 2. That in which the deposit occurs primarily in the skin, the lesions being flat, ulcerative, or hypertrophic. The lymph-glands here may or may not be involved. They are not necessarily involved, and in many cases entirely escape, the skin being the only structure invaded. 3. The papular scrofuloderm, large and small. 4. The pustular scrofuloderm, large and small. I would remark here that two cases of this latter variety have come under my notice during the past year. It is very readily mistaken for the small pustular syphiloderm, and the diagnosis is by no means The large pustular scrofuloderm is commoner, and in appearance somewhat resembles ecthyma. I mention these va-

rieties to point out to you the several forms under which scrofuloderma occurs. but do not propose to describe them to-The present variety is the second of those just defined. It attacks chiefly the neck and upper anterior part of the thorax; it is usually unattended with pain, unless the lesions should be so severe or in such a position as to be easily injured

by clothing, etc.

As to the etiology of scrofuloderma. this is a question it is very difficult to say much about. It is not necessarily connected with privation, bad hygiene, poor food, and the like, since cases are met with in which patients in the higher walks of life, who have been tenderly cared for from infancy, and have enjoyed every advantage of nutritious food, fresh air, change of climate, etc., which could possibly be attained, have vet been the victims of scrofuloderma in its severer forms. While inherited in some cases, I can call to mind several severe examples where the family history showed entire freedom from hereditary taint. Syphilis inherited to the second generation is said to have an influence in the development of the scrofulodermata, but of this there is some doubt. In the third or fourth generation, perhaps, it is possible that the syphilitic cachexia may influence the production of scrofulodermata, just as any other cachectic condition might.

The pathology of scrofuloderma is not dissimilar to that of lupus vulgaris, a disease of which I hope to show you some instances during the course of these lec-It consists essentially in a small cell-infiltration of the skin, finally destroying the same, as in the disease just mentioned; also as in syphilis, but its course

is slower.

With regard to the diagnosis, scrofuloderma is more apt to be confounded with lupus vulgaris or with syphilis than with any other form of disease. When the lymph-glands are involved (as in the present instance), the diagnosis is easy; when, however, the disease affects the skin alone, the diagnosis is often difficult. This ulcer under the right clavicle (which has been described) is quite characteristic. It is deep, with undermined, thin, smooth edges, and with a scanty, somewhat watery secretion, and without any tendency to heal over. It is surrounded by a violaceous area. The syphilitic ulcer is quite differ-

ent: the edges are usually sharply cut, but not undermined; the secretion is much more abundant, and is decidedly purulent. and the areola surrounding it is of a much brighter hue of red. Again, the crusts on the lesions of scrofuloderma are characteristic; they are thin, adherent, and not likely to drop off. An ulcer like this crusts very slowly, where, if syphilitic, a crust would form over it in a few days. The cicatrices here are peculiarly characteristic, and are not likely to be mistaken for the cicatrices of any other disease: they are knotty, raised, and irregular, or they are deep and funnel-shaped, and are extremely disfiguring.

Now, gentlemen, what are you going to do in the way of treatment for scrofuloderma? I need scarcely say that the remedies are those employed against scrofula in whatever organ it may occur. The case before us is a difficult one, and we must at the outset tell our patient that but little can be done for several months, and protracted treatment must result. This ulcer will be the first lesion to granulate and heal over, but the enlarged and suppurating glands will require a much longer time before they are influenced by the treatment. To give an idea of its slow course, I would say that a case like the present will take at least a year, perhaps much longer, to cure under the most favorable circumstances. One discouraging point in cases attending a clinic like this—and, for the matter of that, in private practice—is that they are difficult to hold. Patients become wearied with the tedious progress of the cure, and give up treatment or change their physician. But even where you can retain and control your patient, the cure is a matter of much difficulty. Hygiene is an important factor in the treatment of scrofuloderma. Salt-water or sea baths, sea air, change of climate and scene, travel, etc., are often necessary. Diet is a matter of importance. Patients suffering from scrofuloderma should take an abundance of animal food and considerable fat. erally scrofulous persons loathe fatty food; nevertheless such food, in the most digestible form, is an important aid in the treatment. Cod-liver oil is, I need not tell you, generally necessary. There are cases, however, it must be said, in which the oil seems to do no good. Valuable as it often is, there are many cases where it certainly appears to be quite valueless. Then we

have a serviceable remedy in the jodide of potassium, which should be administered in small doses and continued for a long By small doses I mean one to two time. grains thrice daily. We cannot give such large doses in scrofuloderma as we are accustomed to administer in syphilis, for the system will, as a rule, not bear them. In syphilis there is a tolerance which does not hold in scrofuloderma, and doses of from ten to thirty grains, which are not infrequently administered with benefit in the former, would prove toxic in the latter. Other preparations of jodine are also use-Extract of malt is another useful remedy in scrofuloderma; it seems to act favorably in building up the system. Preparations of iron may be employed with benefit. They may be administered for a few weeks or a month at a time, and may then be intermitted for a while. In fact, you should follow the same plan with the cod-liver oil,—stop it for a while from time to time, and then begin it again. Thus, by careful watching and judicious change of treatment from time to time, you can treat your patient through the year, and may hope for gradual amelioration and final cure.

The local treatment is very important, although, as a rule, less so than the constitutional. Stimulating ointments, as the ung. hydrarg., or ung. hydrarg. nitrat., or ung. hydrarg. ox. rub., are rarely borne well in sensitive skins; they often cause the tissues to break down. When used at all, they should be weakened. In many cases I myself prefer lotions to ointments: at times, both lotions and ointments to-gether. The liq. sodii chlorinat. I find very useful. It should not be applied in full strength,-certainly not at first,-but in the proportion of one to four or six of water, gradually making it stronger until you get the full strength. The ulcers should be bathed well with this lotion. and may then be dressed with some bland oil or ointment, as vaseline or cosmoline.

SUPRA-ORBITAL "TIC" CURED BY INJECTION OF CHLOROFORM.—In a case reported in La France Médicale, from six to twelve drops were injected into the upper eyelid, the point of the needle being directed towards the supra-orbital foramen. At first there was severe pain and some tumefaction, but a single injection gave relief for several months.

# ORIGINAL COMMUNICATIONS.

THEVETIA ICCOTLI AND ITS GLU-COSIDE.\*

BY DAVID CERNA, M.D.

YOYOTE, narciso amarillo (yellow narcissus), and yoyotli are different names given to the tree whose poisonous properties have lately attracted the attention of chemists in Mexico, yoyotli, in the Mexican or Aztec language, meaning hawk's bell or snake's rattle, and it is supposed by some that the popular name is given on account of a belief in the antidotal power of the drug in snake-poison. To the seeds the name of "codo de fraile" (priest's elbow) is given, on account of their resemblance to the human elbow.

This plant is said to have been used by the Aztecs in diseases of the skin, in ulcers, and also in affections of the ear, especially deafness, and the leaves, applied as a poultice, in toothache. In Mexico, at present, the lower classes use a mixture of the fruit and suet in the treatment of hemor-

rhoids.

Prof. Alfonso Herrera found in the plant a non-drying oil, vegetable casein, extractive matter, and *thevetin*.

#### THEVETIN.

After extracting the oil from the seed by pressure, the residuum was percolated with ether, and the liquid evaporated; after which a small quantity of oil, equal to that extracted by means of pressure, was left as a residue; this was afterwards treated with distilled water, and, finally, the substance exhausted was treated with alcohol; the filtered liquid, being evaporated spontaneously, furnished a white crystalline substance, composed of four-sided prisms, the crystals being inodorous, of a sharp, pungent taste, insoluble in water, slightly soluble in ether, readily so in alcohol. fixed and volatile oils and bisulphide of carbon somewhat dissolve it. stance, when treated with dilute sulphuric acid in the usual way, yields, according to Professor Herrera, glucose and a resinous substance. That investigator, therefore, pronounced it a glucoside, and gave it the name of thevetin.

None of the following substances produce

any characteristic reaction with thevetin: nitric acid, hydrochloric acid, nitrate of silver; the chlorides of platinum, gold, and iron; iodide of potassium, tannin, potassa, ammonia; the alkaline carbonates; the ferri- and ferro-cyanide of potassium. All these correspond with my own observations.

I have found the following somewhat peculiar reaction. When sulphuric acid is added to the powdered thevetin, a clear, greenish-yellow color is at first produced; this passes gradually to a brownish, sometimes to a sort of violet, hue, and finally into a deep cherry-brown color, which remains permanent. If now to this last solution the bichromate of potassium is added, a decided change is produced, the solution appearing of a beautiful emeraldgreen color, which after some time assumes a yellowish-green hue; this, left alone for several hours, turns to a dirty green. If a small quantity is placed in a test-tube and heat applied, it at first acquires a liquid form, and, on the heat being continued, part of it sublimates in the form of a white vapor, the other portion remaining attached to the side of the tube as a blackish, sticky substance.

#### PHYSIOLOGICAL ACTION OF THEVETIN.

General Action.—The first experiments made with the active principle of thevetia icottli were those of Prof. Luis Hidalgo Carpio (Amer. Jour. Pharm., 1877).

The most constant symptoms of thevetin-poisoning in animals are the following. At first there is simply a tendency to quietude; by and by very marked muscular twitchings appear, which usually begin at the extremities and gradually pass to the trunk; this is followed by salivation, preceding violent retching and vomiting. sort of general paralysis ensues, accompanied with a marked cutaneous anæsthesia, as the animal would be subjected to pinching, and even burning, without evincing any recognition of the stimuli. Convulsions then appear, which are either clonic or tetanic (most frequently the former), and are followed by an involuntary discharge of fæces, great dyspnæa, and, if the dose has been sufficiently large, The convulsions were not always present, though they frequently occurred, and even in the same class of animals they were sometimes absent, as in the rabbit, cat, dog, and frog. In the few pigeons

<sup>\*</sup> Abstract from one of the inaugural theses to which the Alumni prize was awarded at the Commencement of the Medical Department, University of Pennsylvania, 1879.

and guinea-pigs used the convulsions were generally produced. Thevetin kills, probably, in two ways,—by asphyxia, and by paralysis of the heart, as in many instances the latter would continue to beat after the complete dessation of the respiratory movements; at other times the heart would be completely paralyzed, while the respiration went on as usual. This is especially the case with the frog, which continues to live for a long time (the respiratory rhythm continuing as usual) after the heart has ceased to act. The respiratory action of the poison is, however, usually the more The respiratory action of important. Paralysis of the heart is produced in two ways: in diastole, when the drug is given either hypodermically or into the circulation directly; but when the poison is directly applied to the heart, as in frogs, the organ at first begins to beat irregularly until it entirely stops to act, when it then appears white and very much contracted. Experiments were made by placing the drug on a portion of the heart, and, after the latter had stopped beating. that portion only under the influence of the poison was found to be contracted and bloodless, showing by this that the glucoside has a decided action on the heart-The pupil was never seen to muscle. change; neither the muscles nor nerves became at all affected; as after death both structures responded to galvanic irritation. The post-mortem examinations never showed any marked lesions of the internal organs except the heart, which, as already said, was found, in diastole, full of either dark or scarlet blood; the latter appeared frequently of a bright-red color, perhaps of the natural scarlet, while at other times it was very dark, this being probably due according as death was produced by heartparalysis or by asphyxia. The blood, in either case, coagulates much less rapidly than usual. It may be stated that every now and then death was preceded by a long clonic or tetanic convulsion. In regard to the minimum fatal dose of thevetin, a number of experiments leads us to the conclusion that in the common frog (Rana esculenta) it is  $\frac{1}{60}$  of a centigramme. (To be continued.)

CURE FOR OBSTINATE VOMITING. - The Practitioner says that the spirit of walnut (spiritus nucis juglandis), given in drachm doses three times daily, has checked vomiting after other remedies had failed.

## WHAT IS A CHANCRE?

BY CHARLES W. DULLES, M.D.,

Surgical Registrar to the Hospital of the University of

(Read before the Philadelphia County Medical Society, February 25, 1879.)

HE term "chancre" was, up to very recent times, applied to all venereal It is true that even in the Middle Ages some of these were noticed to be followed by very different results from those of others, and Hunter had in the last century divided them into two groups, the hard and the soft, according to their physical features, recognizing their opposite is-Yet, little more than a quarter of a century ago, the current opinion was that these lesions were due to the same poison, their opposite results being attributed to exceptional virulence of the poison or exceptional vulnerability of the patient,a theory since known as "unicism."

In 1852 the theory since called "dualism" was announced by two pupils of Ricord,-Basserau and Clerc,-who asserted the hard and soft chancre to be utterly different in source, nature, and consequences.

This new doctrine-to which Ricord soon became a convert—led to the use in France of the term "chancre infectant" for the "hard chancre" of Hunter, and "chancre simple" for what Hunter called soft chancre." In 1854, Clerc suggested for the latter the name "chancroide," because some experiments led him to believe it to be a sort of bastard chancre,—like this, but not identical.

In Germany the advance of dualism led to restricting the term schanker to so-called soft chancres, while for the hard the word

"sklerose" was adopted.

In England and America the terms "hard" and "soft chancre" have been, and still are, very commonly used. ease, however, with which mistakes may occur by omission of their adjective parts. the fact that they are in a sense misnomers, and the implication conveyed that the lesions thus designated are essentially the same, make these terms undesira-Thus it happens that writers in our tongue, who aim at accuracy, find it convenient to apply the term chancre to what the French call "chancre infectant" and the Germans "sklerose," while for the local venereal ulcer the term "chancroid" is used.

We have thus a nomenclature clear

enough for all practical purposes, if employed accurately and always in the same sense. Unfortunately, this is not the case. Breaches of the first condition are much more frequent than is creditable to our public writers and teachers, but how to set them right is too plain to need stating. The other condition, however, presents a difficulty really hard to overcome; for here we are met with a difference of opinion,-the difference, in fact, between uni-The same lesion recism and dualism. ceives from followers of these two theories entirely different names. One, relying upon what his eves and hands can learn of it, and irrespective of its consequences, calls it a chancroid; the other, resting solely upon its consequences, and regarding as comparatively unimportant its physical appearance, names it a chancre. The former holds that the same poison may in one individual cause but a local ulcer, and in another set up a disease which may affect and destroy every tissue in the body of its victim and perpetuate itself to the remotest generation of his descendants,—a proposition which the latter unequivocally denies.

Now, where opinions are so diametrically opposed, how shall it be determined

which is correct?

This resolves itself, it seems to me, into another question, namely, whether there be any test which, applied to a suspected lesion, is competent to determine its name and nature irrespective of what may be its issue? If such there be, then a surgeon of sufficient experience and carefulness, after using the test, may with right assert and maintain the nature of such a lesion, no matter what may follow. If, however, no such infallible test be known, it must, I think, be admitted to be more rational to judge a lesion—as a tree—by its fruits. Let us see if such a test exists.

When the dualistic theory was first enunciated, no doubt was entertained on this score, and there were formulated for the differential diagnosis of the chancre and chancroid quite elaborate descriptions, upon which such implicit reliance was placed that it was thought their application would establish this theory upon a sure basis, demonstrating beyond doubt that the chancre was always followed by general manifestations of syphilis and the chancroid never.

These definitions were essentially the

same as are still used in treatises on venereal disease, and may be epitomized as follows. The *chancre* is a lesion, usually single, appearing after a period of incubation, originating as a papule, having a superficial, "scooped-out" ulceration, with scanty serous secretion, not auto-inoculable, with a peculiar underlying induration, indolent involvement of near lymphatic ganglia, and subsequent appearance of socalled secondary syphilitic manifestations.

The chancroid, on the other hand, is a lesion, often multiple, without a true period of incubation, originating as a pustule, developing into a deep, "punched-out" or undermining ulcer, with profuse, purulent, or ichorous discharge, auto-inoculable to an unlimited extent, with a soft, pliable base, either no involvement of near lymphatic ganglia, or, if any, this of a highly inflammatory, usually suppurative grade, but no more remote consequences.

These descriptions are adequate in so many cases that we may not be greatly surprised that the founders of the dualistic theory supposed they would prove adequate in all; nor should we criticise them too severely for being carried away with the fascination of what seemed a complete theory, though it so soon proved vulnerable. For scarcely had it been fairly launched when apparent contradictions began to be observed. Diagnoses founded upon the definitions thus promulgated led to errors of prognosis which were as mortifying to the dualists as they were reassuring to the advocates of unicism. Lesions in which the trusted signs of the chancre were wanting or undiscoverable, but which presented those attributed to the chancroid, were observed to be followed in some cases by manifestation of secondary syphilis.

One thing was at once apparent: either, contrary to the new theory, a chancroid might be the initial lesion of syphilis, or the means formulated for diagnosing between a chancre and a chancroid were not conclusive. The unicists claimed the former, and, with apparent justice, called upon the dualists to abide by the result of the definitions they had themselves framed. This was a very serious summons, to have evaded which would have indicated that dualism had deserted the ground upon which all its deductions were founded, viz., observation, to hide itself behind an hypothesis. If any explanation of the

seeming paradox could be found, it must be by going more carefully over the steps already traced and discovering at what point the error had crept in. This was then done, with the result of discovering a mistake, whose acknowledgment has at times been stigmatized by opponents more zealous than discreet as "begging the question." Nevertheless, honest and able men, convinced of the fundamental soundness of the dualistic theory, have thought it no shame to admit an error in one of its As Helmholtz has said, -with no allusion to our present subject, however.— "He who labors upon a well-secured foundation may, without reluctance, acknowledge an error, since nothing is thereby taken from him but that in which he erred." So, in the juncture alluded to, the dualists soon discovered that it had been a mistake to believe, or state, that to be invariably the case which had merely thus far appeared so in their experience. It was unfortunate, but not irremediable, that they had in their zeal overlooked the fact that accidental circumstances might so modify the appearance of a lesion as to make it vary materially from that which might be regarded as typical, and, indeed. for a time completely mask its true na-Thus, in the case of the chancre. they soon learned that its usual characteristics might be utterly transformed by phenomena resulting from the inoculation previously, simultaneously, or subsequently to that of the proper syphilitic poison of some other virulent matter capable of acting out its own nature irrespective of the former, or by the influence of chemical or mechanical irritants, such as are often furnished by the personal uncleanliness of patients or the friction of their garments. This explanation of these apparent contradictions to the theory of dualism was the fruit of careful observation, conducted—as it probably could never have been conducted elsewhere-in Paris, by Ricord and his disciples, eminent among whom was and is Fournier, and abundantly corroborated by other students of this subject. I have myself too often seen an unmistakable chancre thus converted into a lesion which simulated in every essential point a chancroid to have the least doubt of the fairness or correctness of the explanation. A number of such cases, and to my mind of the most conclusive character, came under my no-

tice in 1877, when investigating, with Dr. Maury, the results of tattooing by a man who, at the time he did his work, had mucous patches in his mouth and used his saliva to moisten his pigments. American Journal of the Medical Sciences, January, 1878.) In these cases we had an opportunity—which, so far as I know, is unparalleled in the history of syphilography-of seeing with our own eves the lesions which furnished the virus, the implements which conveyed it, of knowing the external influences to which the persons inoculated were subjected, and of examining in different stages the initial and later lesions which resulted. these the effect of accidental circumstances was so well marked, that I was deeply impressed with the folly of dogmatically asserting a diagnosis founded upon physical appearances alone, and with the force of Ricord's remark, that "there are cases where only the imprudent or the ignorant speak positively."

The demonstration to the dualists, that a chancre may vary greatly in physical appearance from the description first laid down, was, however, as nothing to the overthrow of another test, which was considered absolutely infallible. It was firmly believed, partly from observation and partly upon theoretical grounds, that, syphilis being ab initio a constitutional disease and the chancroid but a local lesion, the secretion of a chancre could not be successfully inoculated upon the individual bearing it or any other already affected with syphilis: while that of the chancroid was auto-inoculable ad infinitum.

The result of many observations and experiments seemed to establish beyond doubt the latter part of this proposition. Indeed, it is a fact which cannot be disputed, that the secretion of the chancroid is auto-inoculable and reinoculable, if not ad infinitum, at least to a very great number of times. Many experiments go to show this, and none more conclusively than those of that distinguished syphilographer and most ardent of unicists, Boeck.

Let us now examine the latter half of the proposition. In accordance with the theory of zymotic diseases, the supposed permeation of the system with the syphilitic poison was believed to afford a sure means of testing the nature of a suspected lesion. It was thought that if it were a chancre no attempt to inoculate its secre-

contagium.

tion upon the individual bearing it, or another syphilitic, could succeed; and, conversely, that if such an attempt did succeed, the lesion in question was not a chancre. In a sense this was perfectly true. An individual already affected with syphilis could not be made the subject of another syphilis so long as that existed. But it was a grave error to have framed such a definition of the chancre as should seem practically to affirm that the inoculation upon a syphilitic of material from a chancre would never produce any local disturbance whatever. This was one of those lamentable instances of mixed a priori reasoning and generalizing upon too scanty observation, of which the history of medicine furnishes only too many examples.

And it was not long before the fallacy was exposed. Clerc first, and since his day many others,—chief of whom was Boeck, with his process of "syphilization," —have shown conclusively that auto-inoculation with the secretion of a chancre though in many cases its results are purely negative-may, especially if the chancre has been irritated, produce an ulcer, and, moreover, an ulcer having many of the characteristics of a chancroid. Indeed, so strong is this resemblance that Clerc concluded it indicated identity, and suggested for the lesion thus induced, and the local venereal ulcer, the name "chancroïde," already alluded to. He believed this lesion was a sort of bastard syphilis or chancre, capable of producing in a non-syphilitic only a local ulcer, and thus originating a chancroid which would never revert to the true syphilitic type.

Very soon, however, it was demonstrated that it would not do to act upon the assumption that this ulcer was what Clerc supposed it to be, a bastard, or—if the expression be here permitted—an emasculated chancre; for inoculation of material derived from it was shown to be capable of communicating a genuine syphilis.

It then remained demonstrated simply that an ulcer of a definite sort might be induced by inoculating a syphilitic with the secretion of a chancre. The supposition, however, that in such a case the production of this ulcer or its peculiar appearance was dependent upon a specific action of the material derived from a chancre was soon disproved by experiments, which showed that many other

irritating materials might, if inoculated upon a syphilitic, give rise to similar ulcers, and quite as closely resembling chancroids. Thus the secretion of acne pustules, as well as of the vesicles and pustules of scabies, was found capable of inducing such lesions.

If anything was lacking to the demonstration that the successful auto-inoculation of a chancre did not produce another lesion in nature exactly like that from which the virus was taken, it was furnished by the remarkable observation that pus from this induced ulcer might be inoculated upon a non-syphilitic without communicating syphilis to him; as is also the case with the pure purulent secretion of an abscess, of gonorrhea, of a vaccine pustule, or even of a genuine chancroid upon a syphilitic, if unmixed with tissue débris, which appears to contain the real syphilitic

The observation of this fact, in connection with that noted above.—that the inoculation upon a non-syphilitic of the secretion of a suppurative lesion, even a chancroid, on a syphilitic might communicate in one case syphilis and in another simply a local lesion.—led Rollet, in 1860. to propose the theory of the "mixed chancre." According to this, the natures of the chancre and chancroid are so utterly different that both may be inoculated at the same time, in which case the more virulent action of the chancroidal poison will usually declare itself at once, and may conceal that of the syphilitic; this making itself known only after the lapse of a certain time, either locally or remotely, or in both ways. The communication of a chancroid alone, under the circumstances just stated, this theory asserts, is because of a fortuitous absence in such a case of the true syphilitic virus; the pus of a chancroid, like the pus of many other lesions. being capable of serving as the vehicle of the syphilitic contagium, but not being the contagium itself, a distinction—between a vehicle and a contagium—which cannot be too carefully considered.

Finally, were not the explanations already mentioned conclusive as to the error having been in depending too implicitly upon the commonly-accepted definitions in those cases where it was asserted that a chancroid pure and simple had been the initial lesion of syphilis, there remains an argument which cannot be entangled in a

confusion of names. This argument is supplied by an enormous number of "confrontations," in which the lesion in question has been compared with the very one from which it was derived, and which have invariably shown that, whatever might be the appearance of a lesion which was the starting-point of syphilis, the lesion from which it was acquired was accompanied or followed by manifestations demonstrating its constitutional, syphilitic nature as contrasted with the local venereal ulcer. surer is the axiom "Omnis celiula e cellula" than that every syphilis is derived from a syphilis; that, while a chancre may be in appearance indistinguishable from a chancroid, or a genuine chancroid furnish the vehicle for the syphilitic contagium, no pure, unmixed chancroid—that is, on a non-syphilitie-ever furnished this contagium itself.

When, then, a lesion followed by general manifestations of syphilis is called a chancroid, with the idea of denying in that case the existence of a chancre, dualists can only regard this as an error of diag-They disclaim for themselves, and cannot admit in others, the ability to decide in every case, by the application of any of the tests formerly relied on, the nature of a suspected lesion. While there is no doubt of the general applicability and sufficiency of these tests, some cases arise, in this as in every other disease, where only one test is of value,—and that is infallible.

-namely, the issue. And now, if our consideration of this subject thus far has been fair and logical, we cannot avoid the conclusion that the definition of the chancre which has been so long used is liable to variations and apparent contradictions, which, if not kept constantly in mind and duly estimated, may mislead the practitioner and confuse the student.

But, it may be asked, can a better be

suggested?

I think there can. And in this way better,—that it shall be a formula which, if it must be modified, shall be modified by being elaborated, developed, not by having any part of it stricken out or contradicted,—that is, a formula which, while it does not assert all that may be true of any chancre, asserts nothing that is not true of every chancre. The only formula meeting these requirements, that I know of, is this: "The chancre is the initial lesion of syphilis."

Every one knows that—except in hereditary cases—syphilis is acquired through the intervention of a lesion called primary or initial, which is invariably derived from an individual already syphilitic. A chancre is always such an initial lesion. This no one controverts. Whether, however, this statement can be inverted so as to read. "the initial lesion of syphilis is always a chancre," is the question in regard to which unicists and dualists take diametrically opposed grounds. The former answer it at once in the negative, claiming, as we have already seen, that at times the chancroid has been the initial lesion of syphilis.

I must acknowledge for myself, besides what has been stated above, that this appears to me a mere battle of words, the end of which would not be long deferred if all syphilographers would abandon the use of terms whose meaning varies in the mouths of different speakers, and employ only such as could not be mistaken, as "the initial lesion of syphilis," or "the

simple venereal ulcer."

But as this change of terms may never be effected; since unicists claim and dualists unequivocally deny the possibility of determining the nature of every lesion by other means than its issue; since, when guided by the formulæ we have been considering, positions have been reached which dualists believe to be utterly untenable, it behooves the latter, I believe, with unswerving steadfastness to hold to the simple formula, "the chancre is the initial lesion of syphilis," in accordance with it to shape all their utterances, never permitting themselves to become involved in a confusion of tongues, but always expressing themselves plainly, concisely, and consistently. This I conceive to be a method as dangerous to a false hypothesis as it is favorable to discovery of the truth.

Thus, gentlemen, in discussing the question before us, I have submitted to your consideration certain convictions in regard to the chancre, with an outline of the train of reasoning by which I have been brought to entertain them. The answer to our question may seem naked, but it is the only one, so far as I know, which cannot be abated one jot. It will, I believe, be useful, as serving for a foundation upon which a more fully developed structure may rest. Time forbids that we should now undertake this second step. For the present I cannot go beyond the object I proposed to myself in undertaking this study, namely, to make a plea for and a contribution, however imperfect, towards the attainment of a higher degree of accuracy, exactness, and precision in the use of the word "chancre."

222 SOUTH FORTIETH STREET.

# THE MERCURIAL TREATMENT OF CHANCRE.

BY WILLIAM G. PORTER, M.D.

Read at a Conversational Meeting of the Philadelphia County Medical Society, February 25, 1879.

A T a meeting of this Society, held on the 22d of November, 1876, I had the honor of reading a communication on the treatment of chancre, in which I advocated the internal administration of mercury in small doses, as soon as the diagnosis of an infecting chancre had been made, without waiting for the appearance of secondary symptoms, and claimed that it always modified very markedly the subsequent evolution of syphilitic symptoms, in some cases prevented their appearance altogether, and, if persisted in for a long time, cured the disease.

As illustrations of the effect of this treatment, I have ventured to hope that the reports of the following cases might not prove uninteresting to the members of

the Society.

The first two cases illustrate the results of the mercurial treatment of the initial lesion itself; the last case shows the good effect of the long-continued treatment in cases which have been allowed to show secondary symptoms before mercurial treatment is instituted.

I was consulted, on the 17th of May, 1877, by Z. A., white, U. S., single, about 30 years of age, in good health,—which he had always enjoyed,—who showed me a suspicious looking sore on the penis, and gave me the fol-

lowing history.

At least ten days before, his attention was directed to a small sore on the glans penis, on the left side, near the corona, which was at first attributed to a chafe caused by riding on horseback. Some simple ointment was applied, but the sore did not heal, and, becoming alarmed, he consulted me.

The sore presented, on examination, in a very marked degree all the symptoms of an infecting chancre. The induration of its base, and the characteristically enlarged, indurated, and painless condition of the inguinal glands, together with the appearance of its surface

and the character of the secretion from it, left no doubt on my own mind as to its nature.

On informing the patient of my opinion, he told me that he could not understand how it was possible: that, always having had a great dread of venereal disease (although he not infrequently had intercourse with public women), he was always particularly careful as regards ablutions, washing the parts thoroughly, after each act of intercourse, with soap and water, and always using a solution of permanganate of potash as soon as he re-turned home; and, furthermore, that, with a single exception, he had not had intercourse for more than two years without making use of a condom, and that on no occasion had any accident happened to the condom. On inquiring as to the exception, he stated that the last coition had been three weeks before the appearance of the sore, and on that occasion, owing to the circumstances under which the act took place, he had no opportunity either to wash himself or to apply disinfectants for some time afterwards.

As he was still incredulous, although insisting on the accuracy of my diagnosis, I suggested to him that if an examination of his suspected female friend could be obtained, it would doubtless throw additional light on the subject. He at once assented, and promised to do his best to secure it. Meantime, the sore was thoroughly cauterized with nitric acid, and a wash of laudanum and water given him to apply to it. Within a week the examination was obtained, and revealed the

following condition of affairs.

The patient was a blonde, about 17 years of age. On the right labium minor was a large indurated chancre; the inguinal glands of both groins were enlarged, indurated, and painless; an abundant crop of condylomata surrounded the anus; a profuse purulent discharge issued from the vagina; the posterior cervical glands, as well as those on the inner side of each arm, above the elbow, were enlarged, indurated, and painless; the trunk, arms, thighs, and legs were covered with a well-marked syphilitic roseola; there were mucous patches on the tongue, inside of the lips, and on the tonsil.

On questioning her, she stated that the eruption on her skin had existed for some time, but as it had not itched, and did not appear on her face or hands, she had not troubled herself about it. The primary sore had existed, to her knowledge, at least six weeks, and probably much longer, as it was painless. She was placed on appropriate treatment, and when last heard from, about eight months afterwards, was apparently in

good health.

On the 24th of May, 1877, our patient was placed on the protiodide of mercury, in doses of one-quarter of a grain, three times a day from that time until the 7th of December, 1877 (more than six months); he was kept

steadily on mercurial treatment, principally the protiodide, in doses varying from one-sixth to one-half grain, three times a day, always combined with extract of hyoscyamus or small quantities of opium, and sometimes combined with quinine or iron. On the 12th of December, five days after the cessation of the mercurial, it was again resumed, and taken steadily without a longer interruption than a week, and that not more than twice, until the 14th of December, 1878 (more than eleven months), since which time the intervals of rest from treatment have been rapidly increased.

And now, what symptoms of syphilis has the patient presented in the more than twenty months that he has been under observation? He has never had a single symptom to attract the attention or arouse the suspicions of family or friends. He has had no cutaneous eruption; no alopecia; no syphilitic fever; no debility. He has not lost a day from business; not even his most intimate friends have suspected that there was anything the matter with him. The only symptom distinctly syphilitic that he has had has been an occasional slight ulceration along the sides of the tongue and on the inside of the lips like an aborted mucous patch. The patient has never been salivated in the slightest degree, and looks and is as well as he has ever been

X. Y., white, U. S., 22, presented himself, August 14, 1877, with a suspicious-looking sore on penis, and gave the following history:

The last connection was on August 5, nine days before, at which time he was conscious of having slightly torn himself. The little rent in the mucous membrane did not heal, however, and, finding that it was enlarging, he applied to me. The sore, while not a typical chancre, was exceedingly suspicious in appearance. It was cauterized with nitric acid, and dressed with laudanum and water, and an unfavorable prognosis was given. The slough caused by the cauterization separated, but the resulting ulcer did not heal; the base became more indurated, and finally, fifteen days after his first visit to me, there being no longer any doubt as to the diagnosis, he was placed on mercurial treatment, and has been under close observation ever since.

The mercury was continued, almost without interruption, for a year, and at intervals during

the last six months.

This patient began to look and feel badly about the third month, and from the symptoms I was afraid that he was about to have some manifestation on his skin. None appeared, however, and the only suspicious symptom he has ever had, except debility at the third month, has been a milk-white spot on the tongue and another on the left tonsil.

On the 20th of October, 1878, I was consulted by a man who had formerly been under my care as a patient in the Venereal Dispensary of the University of Pennsylvania. He

reminded me that he had been under my care for the treatment of syphilis, both at the dispensary and as a private patient.

He then went on to say that he had shown no evidences of syphilis for a long time, and asked me if I thought that he would ever have any return. On consulting my notebook. I found that he had applied at the dispensary for treatment in the month of March. 1873; that he was then four months advanced in his syphilis, presenting at that time a large indurated cicatrix on the prepuce, specifically enlarged and indurated glands in the usual sites over the body, condylomata at the anus, with a fading eruption on his skin. Mercurial treatment was used and persisted in for considerably over a year, and for a long time after the disappearance of symptoms.

I then told him that, while I could not assure him positively that he never would have any return of his symptoms, I did not think

it at all likely that he ever would.

He then asked me whether it would be possible for him to be the father of a healthy child, to which I replied that after the treatment he had undergone, and the length of time which he had been in perfect health, I should certainly expect that if he was the father of a child, it would be healthy.

He then told me that I had no idea what a load I had removed from his mind; that he had been married in September, 1877, and that he had a baby four months old, which weighed nine pounds and a half at birth, and which was so exceptionally strong and healthy, that, as he expressed it, it worried him to look at it, for, although he had not the slightest reason to suspect the fidelity of his wife, yet, when he saw how healthy the child was, it almost made him doubt its paternity.

To recapitulate, these are the histories of—I. A case of undoubted syphilitic sore contracted from a patient suffering with decided and well-marked constitutional syphilis, presenting, at the time of examination, both primary and secondary symptoms, who, under mercurial treatment, has entirely escaped, during twenty months, all severe symptoms of syphilis, and who has hardly had any symptom of syphilis at all. II. Another case of well-marked chancre, in which, under mercurial treatment for a year and interrupted treatment for six months, the patient has escaped all symptoms of syphilis, with the exception of debility about the third month and a milk-white stain on tongue and tonsil. III. A case of well-marked syphilis, presenting secondary symptoms at the time he came under treatment, nearly six years ago, who, after a continuous treatment by mercury for more than a year, marries, five years after the commencement of his disease and about three years after the cessation of his mercurial treatment, and who is now the father of a baby which weighed nine pounds and a half at birth, which is now more than eight months old, and has not presented a single syphilitic symptom.

These cases are not selected because the results obtained were in any sense exceptional. Just as good have been obtained in many others, and we are convinced can be obtained in the majority of cases of

syphilis.

# TRANSLATIONS.

Two Cases of Strangulated Hernia REDUCED BY ESMARCH'S BANDAGE.—M. Chapelle has recently used Esmarch's bandage in the taxis of hernia in two cases. The first was that of a man who had a fistsized left inguinal hernia of old date, which had become strangulated twenty-four hours previously. The bath, ordinary taxis, and ice had failed to reduce the hernia, even in connection with etherization. An elastic bandage was then applied, fixed first over the pubis, with three or four turns about the scrotum up to the penis, then over this seven or eight reverse turns, and finally the hips included. At the end of an hour the patient felt the gut slip back. The second case was that of a woman with a crural hernia the size of a hen's egg. All efforts to reduce the hernia had failed, and herniotomy was about to be resorted to, when a spica bandage of rubber, with a graduated compress, having been applied, complete reduction took place within two hours. Chapelle alludes to other cases in which this treatment was used successfully.—Col. f. Chir., No. 11, 1879; from L' Année Méd.

Jaborandi in Mumps.—Dr. Testa has treated five cases, four of which belonged to a single family. In two of these the cedema of the parotid region was very marked; the skin was red and shining; the fever intense. Jaborandi was given about 9 A.M. By evening the patients, after having experienced free transpiration and salivation, showed marked amelioration, and desired food. At his visit the following morning, Dr. Testa found the swelling in the parotid region much reduced. Two days later the cure was complete. Dr. Testa concludes that jaborandi is valuable in parotitis, on account of its

hydragogue properties. Administered in good time, it sometimes cuts the disease short. It may prevent metastasis.—Jour.

des Sci. Méd., 1879, No. 3.

TREATMENT OF COLIC.—Phares's method consists in *inversion*,—that is, simply in turning the patient upside-down. Colic of several days' duration has thus been relieved in a few minutes. The patient may take the elbow-knee position, or may lie (face down) on the edge of the bed, with his head and shoulders hanging down. Complete inversion, however, is best. The mechanical aid, in giving vent to gases, is perhaps the most efficient element in the cure.—Jour. des Sci. Méd., 1879, No. 3.

PILOCARPINE IN ECLAMPSIA. — Bidder treated two cases of puerperal eclampsia successfully by means of hypodermic injections of pilocarpine. Two injections, each containing two centigrammes (1/3 gr.) pilocarpine, were employed in each case, together with enemata of thirty to fifty

grains chloral hydrate.

ŒDEMA OF THE FEET AS A SIGN OF IM-PENDING BED-SORES IN TYPHOID FEVER. -Dr. Cuffer calls attention to the wellknown fact that in typhoid fever the lumbar, sacral, and gluteal regions are particularly liable to superficial and deep abscesses. These abscesses are more or less numerous; they commonly make their appearance under the aspect of small tumors the size of a nut, but increase rapidly in size; sometimes join together, and form large collections of pus under the surface. To prevent serious trouble, these abscesses must be opened early; but when not superficial, they may escape detection. patient has a chill, the physician examines him carefully in all parts, but finds nothing to account for it; meanwhile, the abscess is pursuing its insidious course. At this stage, if the gluteal or lumbar regions are carefully palpated, certain deeply situated indurations may be perceived, sometimes only slightly tender. When these are punctured, pus is evacuated. The sign, however, to which M. Millard first called attention, and which Dr. Cuffer lays stress upon, is that of cedema of the feet, which must not be confounded with that accompanying phlegmasia alba dolens, which is so frequent. Often this is the first and only sign of the occurrence of abscess, which, if not discovered in due time, may work serious mischief .- La France Méd., 1879, p. 187.

# PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, MAY 24, 1879.

# EDITORIAL.

# A DISGRACEFUL JUDICIAL ACT.

TT would be hardly safe for us to speak in fitting terms of an exhibition of judicial manners-or, rather, want of manners-which took place a week or two ago in the old Quarter Sessions Court of this city, on the occasion of a hearing following a writ of habeas corpus in the case of a young woman then a patient in the Pennsylvania Hospital for the Insane. not enough for Judge Elcock to commit a breach of all professional proprieties by addressing questions to the witnesses while under examination by counsel, -questions the animus of which was so obvious as to besmirch the judicial ermine with the smut of advocacy. Not satisfied with this, the learned occupant of the bench must join hands with the counsel in the attempt to "bulldoze" (pardon the Americanism) the witnesses who appeared for the defence. If such conduct is countenanced by the Bench and the Bar of Philadelphia, we must submit to it with such grace as may be given; if not, it concerns them more than us to show their feeling respecting it by uttering some fitting rebuke.

As already intimated, the judge discharged the patient, and the fact is suggestive of the gravest consequences. Here was a family of most honorable repute, its members holding the most exemplary relations to one another until one of them, who had been the pride and comfort of the house, was smitten down with a form of mental disease in which, it is enough for our purpose to say, all the kindly affections of her nature were replaced by those of a very different character. Year after year this affliction was borne, under most

discouraging circumstances, until the safety of herself and others, the infirmities of the other members, and the complaints of neighbors, rendered her removal to a hospital imperatively necessary. At the end of three months the writ of habeas corpus was issued, at the solicitation of pretended friends, but against the wishes and protestations of the family. On the trial, five physicians, all holding an honorable place in their profession, testified strongly to the fact of her insanity, and to the necessity of a longer stay in the hospital. had had uncommon opportunities for observing the patient, one of them living in the adjoining house, and thus hearing and seeing, through open doors and windows, most demonstrative manifestations of in-The only effect of his testimony on the judge was to draw from him the remark that hereafter he should not think it safe to live next door to a doctor! Of course, the testimony of the father and brother, recounting scenes of discord and confusion and instances of unseemly behavior, was regarded as of no account.

Before the writ of habeas corpus was carried out before Judge Elcock, a commission, consisting of Dr. Isaac Ray and two lawyers, Charles G. Muirhead and I. Edward Carpenter, was appointed by Judges Thaver and Mitchell, under the sixth section of the act of 1869. It examined every witness that appeared, -viz., the father and brother; the doctors who signed the certificate, Morton and David F. Woods (151 North Fifteenth), also Reed, who had been the family physician, and Strawbridge, who had attended in the family, the mother, and also Dr. Kirkbride. Her counsel declined to call any witnesses, and she, Miss ----, declined to The commission decided unaniappear. mously that she was insane and a fit subject for the care and attentions of a hospital, Dr. Ray saying that he had never known a case where the evidence of insanity was

In a land where the judiciary is elected by politicians, we must not, of course, expect too much, and consequently it is scarcely right to bear too hard upon the judge who released Miss H.: but it does seem right that some one should call attention to the fact that the sane, as well as the insane, need protection; that there is no trouble more wearying to mind and body than that of daily life with an insane relative: that the peace and good name of a whole family may be utterly blasted by the action of just such an irresponsible person as Judge Elcock has released; and that it is not the "doctors," but the community, that ought to be concerned in cases like the present.

# PROCEEDINGS OF SOCIETIES.

THE AMERICAN MEDICAL ASSOCIATION.

FIRST DAY'S PROCEEDINGS.

GENERAL Session.—Promptly at eleven o'clock A.M. on Tuesday, May 6, 1879, Dr. Theophilus Parvin called the meeting to order, at De Give's Opera House, Atlanta, Georgia, and requested the Rev. D. W. Gwin, D.D., of the First Baptist Church of Atlanta, to open with prayer the Thirtieth Annual Session of the American Medical Association. After an address of welcome from Dr. Logan, chairman of the Committee of Arrangements, the president delivered his annual address, which was scholarly in tone and composition, elevated in thought and expression, and inspiring in sentiment and manner of delivery. The warmth and earnestness of the speaker as he uttered a masterly protest against the tendency to materialization shown by many of the laborers in the field of natural science, rose to eloquence when he declared his solemn conviction of a future existence and life beyond the grave. He concluded with the following beautiful reference to the large number of physicians who perished in their efforts to stay the epidemic of last year:

"Since we last met together, less than a year ago, hundreds of our profession have fallen victims to the pestilence that walked in darkness and wasted at noonday in so many of the cities of the South. Some of those who thus fell in their efforts to save their fellowbeings from swift death were in the meridian of their powers and of professional success. Others were in the fair morning, with the promise of long years and the hope of high

honors. Can we believe that these heroic men live only in the memory of their friends? From all the martyr-memories of noble men and women, in every age, who counted not their lives dear unto them when principle was at stake, or in sublime self-abnegation sacrificed their lives for kindred, for country, for humanity, there comes a solemn protest against denial of life beyond the grave.

"Accepting gratefully all the facts of science, let us beware of rejecting everything that may not be capable of mathematical demonstration and compelling our assent to absolute necessity. There may be truths more important but less open; whisperings of hope that are sure promise of fruition. The poet tells of the sea-shell when, its polished lips shaken and applied to your attentive ear:

""And it remembers its august abodes,
And murmurs as the ocean murmured there."

So we may hear the deep but distant murmur of the immortal sea as it beats against the shores of time, ready to bear upon its mighty bosom the children of men from life to life, and the law of continuity be found as true of the spiritual as it is of the material world.

"Happy for us, though, unlike the Thracians, we hold no festivities over the dead, if with something of the glad dream of hope, if not in the glory of triumph, we can adopt the familiar words of our great American poet:

""There is no death! what seems so is transition;
This life of mortal breath
Is but a suburb of the life elysian,
Whose portal we call death.""

Prolonged applause followed the closing words of the speaker, and the entire Association rose to its feet in extending to him a vote of thanks. Later in the session five thousand extra copies of this address were ordered to be printed for distribution.

Dr. E. Seguin presented a series of resolutions in regard to the adoption of the metric system, action upon which was postponed until the final day of the session.

On motion, the amendment was adopted consolidating Sections IV. and V., to be known hereafter as Section IV., on State Medicine and Medical Jurisprudence.

SECTIONS.—Dr. N. S. Davis read a report on Climate and Meteorology in the section on Practice of Medicine, which, with the interminable experience of consumptives in Colorado, and some of the "Æro-hygienics of Elevation above the Sea," (!) contributed by Dr. Denison, of Denver, occupied the entire afternoon.

In the section on Obstetrics, Dr. Battey, of Georgia, read a paper on tubo-ovarian pregnancy, with a case; operation at fifth month—death.

Dr. E. Cutler contributed a paper on the Electrolysis of Fibroids, which was read by the chairman in the absence of the author.

Dr. Dunsford spoke on the after-treatment of perineorrhaphy and the disadvantages of constipating the bowels after the operation. and recommended the use of laxatives. This view was supported by Dr. Montrose A. Pallen, of New York, and others, but opposed by Albert A. Smith, of Philadelphia, and R. Beverly Cole, of San Francisco.

Dr. Pallen presented improved retroflexion and anteflexion pessaries of hard rubber which had given him satisfaction in a number of cases. The ice being now broken, gentlemen immediately began presenting pessaries of all sizes and shapes, plain and stem-winders, patent levers and escapement, galvanic pessaries, soft and hard rubber pessaries, pessaries with external support and pessaries without, erect, inclined, round, and square, until the chairman, yielding to the inevitable, announced that Thursday afternoon would be set apart and devoted to the discussion of the entire subject of pessaries, and each member could bring his own, as it is not to be supposed that any one would be considered a gynæcologist until he had invented a pessary.

In the Surgical section Dr. A. C. Post, of New York, reported a case of extensive cicatricial deformity following a burn, which was relieved by a plastic operation. A paper on "Aspiration of the Knee-Joint" was read by H. O. Marcy, of Massachusetts, and generally discussed. It was agreed that where the effusion is purulent free exit should be secured.

with antiseptic precautions.

Dr. Turnipseed presented some surgical appliances that did not seem to meet with much approval from the section. A case of chronic luxation of hip was reported by Dr. Matham, of Lawrence, Kansas, and Dr. Dawson, of Ohio, exhibited some calculi from the bladder.

The consolidated section on State Medicine and Medical Jurisprudence was well attended,

and the papers were of great interest.

The death of Wm. N. Compton, of Mississippi, the chairman of the former section on Medical Jurisprudence, was announced by Dr. Grissom, who paid an eloquent tribute to the memory of this distinguished gentleman, who perished during the late epidemic, a martyr to humanity. Resolutions were subsequently drawn up and ordered to be spread in the minutes, expressing the respect and regret of the section.

The successful working of the Illinois State Board of Health, and the regulation of medical practice in that State, were the subjects of a report by Dr. H. A. Johnson, which was very favorably received, and an animated

discussion followed.

A thoughtful and practical paper by Dr. S. E. Chaillé, of New Orleans, entitled "State Medical Societies and State Medicine," very clearly enunciated the writer's ideas concerning the functions of the American Medical Association, its relationship to subsidiary societies, and its duty in regard to State Medicine. On motion, the chairman was requested to ask for time on Thursday morning for the repetition of this address before the entire Association.

Dr. E. Seguin read a paper on a "Psycho-Physiological Hand," accompanying epilepsy, and indicating cerebral disease.

The section on Ophthalmology, Otology, and Laryngology, though not largely attended, more than made up any deficiency in numbers by earnestness and valuable communications; and with Dr. Knapp, of New York, as chairman, it held, after the first

meeting, two sessions daily.

Dr. Williams read a paper on "Ivory Exostosis of the Orbit," and Dr. Voorhees, of Memphis, reported a case of great impairment of sight following large doses of quinia. day's session then concluded by the detailing of a case of intraocular sarcoma by Dr. Knapp, and also one of degeneration of iris and ciliary body, probably of syphilitic or tubercular origin. A number of microscopic preparations were shown, and the demonstration was of great interest and permanent

#### SECOND DAY'S PROCEEDINGS.

The Association passed a resolution requesting Congress to reduce the duty on quinine.

The chairman of the section of the Practice of Medicine read a very interesting report of the progress of medicine during the past year, and, in speaking of yellow fever, declared his belief in the necessity of a na-

tional quarantine.

Dr. J. J. Woodward, U.S. A., read the paper of Dr. John S. Billings on State Medicine, which referred particularly to the National Board of Health, and also insisted upon the necessity and advantages of a national regulation of quarantine. Both of these addresses were referred to the appropriate sections for discussion.

The committee appointed last year to consider the propositions contained in Dr. Richardson's address, recommended that, for the portion of the present code relating to prize essays, there should be substituted four prizes of \$250 each for the best original contributions to medical knowledge. The report was received, and committee discharged. The resolution lies over for one year as an amend-

Amendments (1) restricting the nominating committee in their choice to the names of those actually in attendance, and (2) regulating the manner of choice of officers, and altering the composition of the committee, were laid on the table; another one erecting a new section on the genito-urinary organs and syphilis, including dermatology, was referred to the section on Surgery, where it was finally withdrawn.

Dr. N. S. Davis offered an amendment to the code of ethics, condemning the action of any member of the Association who may be engaged in aiding in the instruction of students expecting to engage in an irregular or exclusive system of medicine.

This was vigorously opposed by Dr. Dunsford, of Ann Arbor, who, in an elaborate and logical argument, exposed the inexpediency and inefficiency of such a rule. On motion, the amendment was laid on the table until

next meeting.

SECTIONS .- Dr. L. D. Bulkley, of New York, read a paper on the use of water in the treatment of diseases of the skin, which presented a careful review of the therapeutic results from baths and affusions in different

affections of the cutaneous surface.

The address of the chairman was discussed, and the apple of discord, in the shape of quarantine against yellow fever, made its appearance. After considerable discussion, which showed a decided difference of opinion as to the practical value of quarantine, the address was referred to the publication committee.

The address of the chairman of the Committee of Arrangements (Dr. Logan) contained a statement, which so aptly expresses the present aspect of the question, that it may be

reproduced here:

"For all practical purposes, it is not necessary to demonstrate whether yellow fever is always imported, or whether, under certain peculiar and exceptional circumstances, it arises upon our coast from local causes alone. That it can be imported, and will, or can, become epidemic from the neglect of proper sanitary regulations in certain localities, will not be questioned. That it may be imported and not become epidemic in the absence of the circumstances which favor its propagation will also be admitted without discussion. The very warm contest, therefore, which has been carried on for many years in regard to the exotic or local causes of yellow fever, does not seem to be justified by the necessities of the case, or the importance of arriving at conclusions of a definite character with reference to the possibility of excluding it altogether as an epidemic from our shores. Let the facts of importation or local origin, or of both, be as they may, no argument is needed to establish the proposition that no means of preventing the occurrence of yellow fever should be neglected which could, by possibility, be brought into requisition.

"The value of a properly regulated system of quarantine cannot be successfully controverted. The value of an enlightened and thorough system of internal sanitary regulations cannot be estimated. In both points of view the facts developed in regard to the recent epidemic of yellow fever upon our coast form a sad commentary upon the wisdom and

fidelity of both State and local authorities. Not being a statesman, and this not being the time or the occasion to discuss the question of federal or State jurisdiction, which has excited some controversy of late, I will still venture to say that if those States through whose borders the fell destroyer makes his incursions continue to be insensible to the lamentations of widows and orphans and the wreck of homes and fortune, I, for one, would gladly welcome the intervention of the paternal care of the general government in the effort to save the lives of the people, even though it be at the expense of a cherished political idea."

In the section on Obstetrics, Dr. Chadwick's gynæcological operating table was shown by Dr. Marcy, and generally examined and ap-

proved.

The chairman, Dr. Lewis, of Louisiana, read a communication from Dr. Cutter, of Massachusetts, on the Treatment of Uterine Displacements by the Stem Pessary. Here the tide was again stemmed and discussion prevented by a reminder from the chairman that the subject was the order of the day for

to-morrow.

A number of instruments devised by Dr. E. B. Turnipseed, of South Carolina, were exhibited, including a new hysterotome, a new uterine dilator and speculum, a new vaginal speculum, and a new apparatus for delivering women without the use of the forceps, on the principle of atmospheric pressure. The latter device consisted of a hollow rubber sphere, which, being exhausted of air, is to be accurately applied to the presenting half of the child's head; placed in this position, according to the programme, it then permits traction to be made upon it, and the baby naturally follows, just as the reluctant brick obeys, the centrally supported disk of sole leather in the hands of the infant Archimedes.

Dr. Montrose A. Pallen, of New York, presented diagrams of lacerated perineum, and explained his operation for restoring the base of support to the vagina. He also demonstrated a peculiar operation for the cure of sterility in certain cases by vagino-cervoplasty, including the amputation of part of an elon-

gated cervix.

In the Surgical section, Dr. Sayre explained his treatment of spondylitis, and afterwards applied the plaster cuirass.

Dr. Link, of Indiana, in a paper on this subject, recommended amputations of the extremities by the cone-shaped method.

Dr. Campbell, of Augusta, read details of

46 cases of vesical calculus.

In the fourth section a paper by Dr. Storer, of Rhode Island, on "The New Principles of Protective Sanitation in its Relation to Public Hygiene," was read by Dr. Dunster, in the absence of the author. It refers to a plan of co-operative sanitation that is applicable in

its present shape to small communities, and is apparently capable of extension to larger ones.

The resolutions in Dr. Billings's annual address as chairman of the section were next considered, requiring the American Medical Association to request every physician to aid the superintendent of the census in his efforts to make up complete statistics of mortality. Every physician also is recommended to keep notes of his cases from the first of June; blanks will be furnished, on application, for making out the reports requested. These resolutions were adopted.

The operation for cataract engaged a large part of the attention of Section VI. during the day, papers being read on this subject by Dr. Knapp, Dr. Pope, and Dr. Calhoun, and it

was freely discussed.

Dr. Dudley Reynolds explained his method of treating cystoid cicatrix by pressure.

Dr. Smith, of Detroit, reported a successful

case of operation for xerophthalmia.

Some specimens of intra-ocular disease were exhibited by the chairman; which attracted much attention,

#### THIRD DAY'S PROCEEDINGS.

Reports were received on Ozone, from N. S. Davis; on Necrology, by J. M. Toner; and one on the National Library, by Dr. H. C. Wood, in which reference was made to the labors of Dr. Billings and the publication of the "Index Medicus."

Dr. Woodward publicly thanked the Association for the warm support it had given to his colleague, Dr. Billings, in his efforts to complete the great and important work in

which he is now engaged.

The paper of Dr. Chaillé, already referred to, was now read. It contained certain recommendations contemplating a more thorough organization of State and county societies, urged the publication of an official journal in the place of the annual Transactions, and called for the appointment of a standing committee of five to consider the more efficient organization of this Association and its branches.

Dr. Moses Gunn, of Chicago, chairman of the section on Surgery and Anatomy, read a review of the more prominent evidences of advance in his department, devoting considerable time to discussing the origin of pus, and to the application of the antiseptic sys-

tem to surgery.

The chairman of the section on Obstetrics then read a very interesting paper on the progress in his department. He favored antiseptic precautions after delivery; discussed gastro-elytrotomy; recommended tardy ligation of the umbilical cord; and discouraged traction on the lower jaw in head-last labors. In cases of cancer of the uterus he advised removal of the entire organ; and in Cæsarean section thought that the removal of uterus

and ovaries was justifiable. In uterine fibroids he recommended small doses of ergot and of iodine, and hot-water vaginal injection.

On motion of Dr. Seguin, the following

resolutions were adopted:

Resolved, That the American Medical Association

1. Adopts the international metric system, and will use it in its Transactions.

2. Requests that those who present papers at its future meetings employ this system in their communications, or reprints thereof.

3. Requests the medical boards of the hospitals and dispensaries to adopt the metric system in prescribing and recording cases; and that the faculties of the medical and pharmaceutic schools adopt it in their didactic, clinical, and dispensing departments.

4. Requests the physicians familiar with the metric system to help their confrères and the druggists in its application; and the delegates present at this session to work up the acceptance of the metric system by their respective

county and State societies.

5. Requests our president to name a metric executive committee, of which he shall be the ex-officio chairman, and whose task it will be to give unity and rapidity to this metric movement.

SECTIONS.—In the section on the Practice of Medicine, an exhaustive paper was read on Veratrum Viride, by G. F. Cooper, of Georgia; followed by a report of a case, and specimen, of plastic bronchitis, by Dr. Glasgow, of Missouri; and finally a clinical lecture on "Inflammation of the Hair Follicles of the Beard, by Dr. J. V. Shoemaker, of Pennsylvania.

In Section II., Dr. Albert H. Smith, by appointment of the chair, opened the discussion on pessaries, and gave an exceedingly clear résumé of the subject, describing the conditions to be met and the principles of treat-

ment

Dr. Pallen, of New York, differed from the views just expressed as to the etiology of displacements. The broad ligament is not a true ligament, and does not sustain the uterus; the uterus owes its support to the surrounding organs, and its position is dependent upon the integrity of the perineum.

In the Surgical section papers were read on the écraseur for removal of uterine tumors; on carbolic acid injections for hemorrhoids; on gonorrhœa; and a new instrument for producing anæsthesia, the latter by Dr. Pollock,

of Pittsburg.

In the section on State Medicine, Dr. Chaillé's recommendations were adopted, and the resolutions again referred to the general session. A paper on the "Medical Examiner System of Massachusetts" was read and referred for publication.

A report from Dr. Billings on the construction of hospitals, accompanied by plans and diagrams, was presented and likewise re-

Dr. Alban S. Payne submitted a paper on the "Treatment of Smallpox by Elimination."

In Section VI., Dr. Knapp gave an interesting lecture on "Mastoid Disease," which was abundantly illustrated, and led to a prolonged discussion.

#### FOURTH DAY-THE ADJOURNMENT.

Dr. Knapp presented a comprehensive account of the progress in his department during the past year, which was listened to with close attention throughout. Among the recommendations may be noticed the value of eserine in glaucoma, of Duboisia as a substitute for atropia, and his improvement upon the operation for cataract by the use of his needle with a cutting edge. He reports having performed over seven hundred cataract extractions.

The resolutions offered by Dr. Chaillé were adopted, and the president appointed the following standing committee on the more efficient organization of the Association and its branches: Drs. Gross, Pratt, Davis, Bell, and Garcelon. The secretary announced that State boards of health had been established in twenty-one States of the Union.

The committee on prize essays awarded the prize to Allen McLane Hamilton, of New York, for a thesis on "Primary and Secondary (local) Degeneration of the Lateral Column of the Spinal Cord, with especial refer-

ence to an Infantile Rare Form.'

The committee on nominations having reported the election of Louis A. Sayre, M.D., of New York, as President, and R. Beverly Cole, of California, First Vice-President, Dr. Parvin, in a short and complimentary address, introduced Dr. Sayre, the president elect, who returned his acknowledgments of the honor conferred, amid prolonged applause.

#### THE ENTERTAINMENTS.

During the week, the first evening was devoted to calling, by invitation, upon Governor Colquitt; the next to attending a dozen receptions; the third to a grand banquet given by the profession and citizens of Atlanta to their guests, the American Medical Association and the Public Health Board; and on Friday evening there was a reception at the Kimball House. On Saturday a large number of delegates accepted an invitation to attend a barbecue at Augusta; others went west to Chattanooga, and beyond, to attend the celebration at Danville in honor of Dr. Ephraim McDowell, the founder of ovariotomy. All left reluctantly, and with very favorable impressions of their hosts and of Atlanta.

The next place of meeting is New York; time, the first Tuesday in June, 1880. W.

THE CONVENTION OF AMERICAN MEDICAL COLLEGES AT ATLANTA, GEORGIA.

WHEN the subject of higher medical meeting of the American Medical College Association held at Buffalo one year ago, the opinion was very generally expressed that it is a duty, which the colleges owe to the profession, to extend their period of instruction to at least three years, and to exact some preliminary preparation of students, as shown by examination before matriculation. Just in time to prevent the adoption of resolutions pledging the institutions constituting the Association to conform to popular opinion by conceding these points, it was discovered that the Association had no jurisdiction over the colleges, and that no action or resolution of the meeting would be at all binding upon the latter. It was then directed that a call should be issued for a convention of representatives, under a series of resolutions offered by Prof. S. D. Gross, which, after amendment, were adopted, as follows:

"Whereas, It is eminently desirable that the medical schools of this country should adopt a uniform system of instruction, of a grade fully in accord with the requirements of the age in other branches of study and with the practice of the medical institutions

of Europe: and

"WHEREAS, All the efforts to bring about such a change on the part of the American Medical Association, of the Association of Medical Teachers assembled at Cincinnati in 1867 and at Washington in 1869, and of different State medical societies, have signally failed; and

"WHEREAS, The present time seems to be peculiarly favorable for taking strong ground upon the subject, inasmuch as it is now attracting general attention throughout the

United States: therefore

"Resolved, That this Association respectfully and earnestly requests that the regularly organized and accredited medical schools of the United States hold, at their earliest convenience, a meeting for the purpose of adopting some definite and final action upon a subject of such vital importance to the dignity, character, and usefulness of the profession and the welfare of the American people;

"Resolved, That, in order to impart proper efficiency to this plan, each and every college shall be requested to send two delegates, consisting of one member from each board of trustees and of one member of each faculty, with full power to act for their respective

institutions;

"Resolved, That the medical and secular press throughout the United States be respectfully requested to lend their aid in the dissemination and discussion of these preambles and resolutions, in order to place the whole

matter of medical education prominently be-

fore the profession and the people; "Resolved, That a copy of these preambles and resolutions, signed by the president and secretary of this Association, be transmitted to the officers of every regularly constituted medical college in the United States, with a request to hold the contemplated meeting at Atlanta, Ga., on Friday, May 2, 1870.

These resolutions were adopted, and copies were sent to all accredited American medical colleges, with an earnest request for their special attention to the matter. The amount of interest shown by the management of our medical schools generally in medical reform, may be inferred from the fact that representatives from only twenty-five out of fifty-nine institutions were found to be in attendance upon the session. At this comparatively small meeting, moreover, there appeared to be such diversity of opinion, that nothing definite was accomplished when the hour of adjournment arrived. Prof. Gross presided, but his recommendations did not receive the support that he had anticipated. The following propositions, after much discussion, were finally referred to the meeting of the Amer-

ican Medical College Association:
"First. That all medical colleges should require three regular courses of lectures in three separate years as one of the requirements for conferring the degree of M.D.

"Second. That all medical colleges should require, before admitting to matriculation, a preliminary examination,—such examination embracing at least the elements of the physical sciences in addition to a fair English education.

These propositions were adopted as the sentiment of the Convention, and referred to the Association of American Medical Colleges; and the Convention adjourned sine die.

Thus ended, in vapor, a convention from which so much had been expected,-the only commission ever created having the authority to set American medical colleges right before the world in regard to questions of vital importance to the profession and people of this country. Since our colleges have failed to seize this opportunity, and have not risen to the moral height demanded by popular sentiment, it must be evident to every advocate of a higher medical education that it is not upon voluntary action on the part of the schools that we can depend for any material advance in the requirements for the medical degree.

THE ASSOCIATION OF AMERICAN MEDICAL COLLEGES.

This Association met on Saturday, May 3, 1879. Dr. N. S. Davis being called to the chair, the death of Prof. Biddle, the President of the Association, was announced, and the following memorial was presented by a committee appointed for the purpose:

"Since the assembling of this Association. death has invaded our circle and launched his shaft with unerring aim against our pre-

siding officer.

"Professor J. B. Biddle, who presided over the convention which called this Association into existence, and who was twice its president, was widely known as a gentleman of culture and refinement, a teacher who possessed the happy gift of imparting knowledge, a physician of rare ability, and an author whose written wisdom reached and benefited his professional brethren.

"To us who have felt his guiding hand in our deliberations, he was known as an officer quick perception, clear head, decisive

ruling, and winning urbanity.

"While, then, we are compelled to bow in submission to the stern decree which has removed him from our midst, we cannot refrain from expressing our deep sorrow for our own loss, and tendering to his bereaved family our heartfelt sympathy in this their great hour of grief and sorrow.

"Let us honor his memory by emulating "W. W. DAWSON, his virtues.

"S. D. GROSS, "Moses Dunn."

The motion that a copy of these resolutions be spread upon the minutes, that a memorial page be devoted to them in the official report of this convention, and that a copy be forwarded to the bereaved family, was carried.

The election of officers being next in order, Dr. Samuel D. Gross, of Philadelphia, was elected President; Dr. N. S. Davis was elected Vice-President; and Dr. Leartus Connor, of the Detroit Medical College, was elected Sec-

retary and Treasurer.

Next in order was the reading of a communication from the "Convention of Medical Colleges." At that convention the questions discussed were: (1.) Should all medical colleges require three regular courses of lectures in three separate years as one of the requirements for conferring the degree of M.D.? (2.) Should all medical colleges require before admitting to matriculation a preliminary examination, such examination embracing at least the elements of the physical sciences in addition to a fair English education? Since only twenty-five of the fifty-nine medical colleges in the United States were represented in that convention, they were powerless to act; and this communication was intended to bring these questions before the present convention, where decisive action could be taken upon them. The first of the questions thus referred was disposed of by an amendment to the Articles of Confederation, proposed by Professor Menees, by which said question was answered affirmatively. Under the rules of the Association, the amendment was tabled till the next session. The second of the referred questions was laid upon the table for one year.

The following amendment to Art. I. of the Articles of Confederation was then offered by Professor Bodine: "The majority of the members of one faculty shall not constitute the majority of the members of another faculty, unless the sessions of the two schools are held simultaneously.

The amendment was seconded, and under

the rules lies over till next year.

Professor Chaillé called from the table the following: "Resolved, That it shall be considered derogatory to the dignity and good standing of any medical college represented in this Association to advertise in any other than a strictly medical publication the names of its professors, with their respective chairs.'

This resolution does not apply to the annual circulars and catalogues issued by the colleges, but to advertising non-professional periodicals, newspapers, and other like publications in which only a card calling attention to the advantages of the school, length of session, fees, etc., with the names of the executive officer or secretary appended, should be permitted.

After full discussion, the resolution was

adopted.

Professor Chaillé offered the following amendment to the Articles of Confederation: "No college shall advertise in any other than a strictly medical publication the names of its professors, with their respective chairs." The amendment was seconded and laid on the table till next year.

The report of the treasurer, Dr. L. Conner, showing a balance in the treasury of eighty

dollars, was then read and approved.

Professor Greenville Dowell offered the following: "Resolved, That the metric system shall henceforth be used in the minutes of this Association, and in all other papers published under its authority, and that the professors represented in this Association be requested to teach the metric system in their schools." Which was laid on the table.

Professor Dunster offered the following amendment to the By-laws: For Section 1, Article 5 of the By-laws, substitute the following: "Delegates to the meetings of the Association may be chosen from among the members of the governing boards of a college, or from members of the faculty having a vote upon the graduation of students, or from both; but in no case shall such double representation entitle the college to more than one vote in the Association." Laid over till next year.

On motion of the secretary, thanks were tendered Professor Westmoreland and the Georgia State officials for providing such comfortable and convenient rooms for the

meeting of the Association.

On motion of Dr. Gross, thanks were tend-

ered the officers of the Association.

It was then moved to adjourn to meet next year in the place that the American Medical Association meets, and on the Monday preceding the convening of that body.

THE ASSOCIATION OF AMERICAN MEDICAL EDITORS.

At the suggestion of Dr. Theophilus Parvin, of Indianapolis, a number of medical editors in attendance upon the meeting of the American Medical Association in 1869, assembled together and formed a permanent organization for the promotion of mutual acquaintance and social intercourse among American medical editors, and for the discussion of topics of common interest, and stated meetings have been held each year since that time.

The eleventh annual session of this Association was held in Atlanta, Georgia, May 5, 1879, on the evening before the meeting of the American Medical Association, Dr. Wm. Brodie (New Preparations), of Michigan, presiding. Representatives from fifteen journals were in attendance. In the president's address the practice of advertising patent medicines by medical journals, and recommending their use to physicians, was condemned as contrary to the spirit of the code of ethics, and a set of resolutions was offered expressing this sentiment. On the motion of Dr. Dunster (Michigan Medical News), the resolutions were unanimously adopted, and they were directed to be transmitted to the American Medical Association.

Dr. Parvin (American Practitioner) referred to the loss that American journalism had sustained in the death of Dr. Isaac Hayes and Dr. Waddell, and moved that a committee be appointed to present appropriate resolutions.

After a general discussion of the objects of the Association and its prospects for future usefulness, the election for officers was held for the ensuing year. The nominating committee presented the following ticket, which was unanimously elected: For President, Dr. T. S. Powell (Southern Medical Record), of Atlanta, Georgia; for Vice-President, Frank Woodbury (Boston Medical and Surgical Journal); Secretary, Frank H. Davis (Chicago Medical Journal). Time and place of meeting, as usual, to be governed by the action of the American Medical Association.

A dinner was given to the Association by the staff of the Southern Medical Record, on Wednesday, May 7, at which great harmony

prevailed.

#### PHILADELPHIA COUNTY MEDICAL SO-CIETY.

T a conversational meeting, held at the A hall of the College of Physicians, Philadelphia, February 25, 1879, Dr. Henry H. Smith, President, in the chair, Dr. C. H. Dulles read a paper entitled "What is a Chancre?" which was generally discussed.

Dr. Henry H. Smith, in opening the discussion, said that, though he had been much gratified in listening to the paper, he could not entirely agree with all that its author had presented. The term chancre was an unfor-

tunate one, and never had any definite meaning, but was of the same unsatisfactory derivation as the word cancer, which, as applied to tumors, only indicated some peculiarity in appearance or growth, especially resemblance of the enlarged veins to the claws of a crab. Chancre has the same derivation, though it is commonly held to be only the expression "the primary lesion of syphilis," or "the primary sore," and this latter is a much better name, the term chancre being a bad one. The real question for consideration at this time, however, is that of treatment, whether it shall be by mercurialization or not. Dr. Smith's ex-perience, during more than forty years, had made him an anti-mercurialist. The discusmade him an anti-mercurialist. sion of this treatment is certainly of interest, but probably to the end of time the profession will not be united upon the subject. Dr. Smith was also a "unicist," and thought that there was but one syphilitic poison, this producing a variety of effects, according to the health, cleanliness, etc., of the patient. In a healthy subject the poison occasions a rather simple inflammation, and one in accordance with the strength of the primary infection, its subsequent course being that of a zymotic disease, which, in its development, resembled vaccina or the inoculation of variola.

Dr. Smith differed from the sentiments of the author of the paper in one respect, viz., the earliest form of the inoculation. In his opinion, a chancre is first a vesicle, and not a papule, as stated by the writer, and, whether the lesion is found in the skin or on the mucous membrane, the first effect of the poison is an irritation, that is soon followed by inflammation and effusion of serum beneath the surface of the cuticle or epithelium, thus creating a vesicle. Subsequently, the fibrinous exudation may create a hardened base, but he had never seen it offer at first the characteristic of a papule, If we assume that a papule is primarily formed, we must believe that the fibrinous or secondary product of inflammation is thrown out first, instead of the serum. as we ordinarily find it. The slight elevation of the cuticle, caused by the effusion of serum beneath it, may have been mistaken for a papule, and may result from fibrin, as is sometimes formed in the fibrinous deposit around an indurated chancre or around an ordinary boil or abscess. If there is excessive irritation, and the tissue-cells die faster than they can be reproduced, there will be sloughing, and the ulcer will have its edges defined by the fibrinous base, and look as if cut out with a punch. If the inflammation spread outside of this limiting circle, it may progress in all directions, producing, in the regular order. irritation, inflammation, with serous effusion; then fibrin and the appearance of a papule, and, finally, ulceration, the pus from which, by poisoning the blood, shows its effects in the eruption of secondary syphilis.

The effects of syphilitic poison are certainly

due not so much to its amount or quality as they are to the condition of the patient at the time of inoculation. This is often well illustrated in the Pennsylvania Hospital, where you find the sailors speaking of the "old-fashioned Spanish pox," this exhibiting a virulence in subjects broken down by dissipation which is unknown in healthy individuals.

Dr. M. O'Hara inquired as to what time should elapse before the appearance of secondary symptoms; what advice could we give, after a chancre, to a person desiring to get married, after many years' non-appearance of syphilitic sequelæ. He had been told that after the primary infection (chancre) the disease may remain latent twenty or thirty years and then show life, like the mammary seeds. He had a case now which perplexed him, of a recurrent ulceration after probable infection five months preceding, in which there are no constitutional symptoms, and he doubted if there had been a primary infecting chancre. He had given mercurial treatment freely, to give the patient the benefit of the doubt. The man was pronounced to have a syphilitic chancre by other physicians, and yet not one constitutional symptom,—merely a return of ulceration around the corona glandis. Has any gentleman experience of a hidden syphilis after the chancre alone for many

Dr. Henry H. Smith did not believe that there was any patient who could not be salivated; and, secondly, did not believe that we ever have cases of syphilis which go many years without constitutional symptoms. The ordinary period of incubation is from three weeks, though it might possibly extend to three months. He did not know of any authentic cases on record where a number of years have elapsed between inoculation and the development of disease, and where this apparently occurred, he thought it was certainly due to a subsequent infection.

Dr. C. B. Nancrede recalled a case he had seen reported, where fifty years had elapsed before the secondary symptoms appeared; it was in the Paris correspondence of one of

the London journals. Dr. H. H. Smith sa

Dr. H. H. Smith said Ricord had one expression that might serve as an explanation of some of the statements appearing in the journals, viz., "that all men were liars" in such cases. In cases where the symptoms are delayed to an inordinate period, there may have been a mistake in the diagnosis; the patient may be subject to hallucinations, or there must have been a subsequent infection which was overlooked,—perhaps a "masked chancre." He would not deny that a man could have secondary symptoms fifty years after a chancre, but he had more recently obtained a new one; he had had a patient that he was treating for gonorrhea who was seventy years of age.

Dr. William G. Porter.—Patients will often

deny, with the exception of the chancre, that they ever have had any of the symptoms of syphilis, because the secondary symptoms are sometimes so slight, and usually so painless, as not to attract their attention. Surgeons are familiar with cases where all the symptoms of both primary and secondary syphilis are present, and yet the patient is entirely unaware that he has had a chancre until it is pointed out to him. The initial lesion is sometimes so insignificant in its appearance that no

attention whatever is given to it.

Dr. W. R. D. Blackwood did not agree with the lecturer entirely. He thought it very important to be able to answer at once the question of the patient as to whether or not he has a chancre, instead of deferring the diagnosis until the secondary symptoms appear. The surgeon ought to be able to tell a patient whether a venereal ulcer is syphilitic or not when it is first presented. The attendant must decide as to the treatment, and whether it is safe for the patient to get married, should such an event be contemplated. The president has spoken of the modification which the poison undergoes, according to the patient. In his own experience while in the army, after the war, while stationed at Lexington, in charge of a large number of soldiers, he had instituted a systematic and thorough inspection of houses of prostitution. One syphilitic woman would invariably give the soldiers a hard chancre, which resulted in constitutional sequelæ; another always the inflammatory sore or chancroid. From the first at least thirty men obtained a typical chancre, and the condition of health had apparently nothing to do with it. A couple of colored girls running around the camp always gave the men chancroids and nothing else. It is important to know these sores by sight, so as to institute treatment at once. tient is not interested in speculative diagnosis; he wants to be cured without delay. The chancre is an innocent little sore, which may be overlooked or not noticed until the secondary symptoms appear, but it is ruinous to the patient. Chancroids often make a large local sore, and attract a good deal of attention, but there they end; no constitutional results are entailed.

Dr. Packard thought that there was, as a rule, a clearly-marked distinction between the two forms of venereal sore,—the true or hard chancre and the soft chancre or chancroid. The latter he believed to be a purely local affair, amenable to local treatment; the former a manifestation of constitutional taint. The true chancre is single, not auto-inoculable; seldom, if ever, becomes phagedenic; is attended with a chain of slightly enlarged inguinal glands; and rarely fails to induce a long series of clearly systemic phenomena. The chancroid may be multiple; will repeat itself if matter from it is applied to an abrasion of skin or mucous membrane in the per-

son bearing it; often gives rise to suppurating bubo; and is not followed by systemic poisoning. Very possibly the two poisons may be mixed, and give rise to some confusion by the intercurrence of their symptoms; but it certainly seems difficult to explain the clinical experience of every day upon the theory that there is but one virus. The subject, however, is one of very great obscurity, as shown by the conflicting opinions still entertained in regard to it, notwithstanding the constant study and discussion bestowed upon it for so many years past. Hence, unless one can speak from the results of exceptionally wide observation, it is well to be cautious in expressing positive convictions.

Dr. R. A. Cleemann knew of a case of suppurating bubo coexisting with an infecting chancre. A physician had a chancre on the hand from examining a patient; he had a suppurating bubo at the elbow, and afterwords had rescola about six weeks later.

wards had roseola, about six weeks later. Dr. Dulles had purposely refrained from entering upon the subject of treatment, as too extensive for the present discussion. The physical appearances of the chancre and chancroid are generally sufficient to distinguish them, but cases will occur where it cannot be positively decided which is present until the issue has been observed. Among the cases of syphilis he had seen in the wards of Sigmund and of Fournier, as well as in this country, there were quite a number in which a suppurating bubo was associated with the chancre. As stated in his paper, he believed the initial lesion of syphilis may present all the characteristics of the chancroid, except its harmlessness to the general system.

In regard to the pathological nature of the chancre, he stated that it is pretty generally held by syphilographers to be essentially a papule; that, while in the chancroid the process is a tissue-destroying one, that of the chancre is tissue-forming, and consists in a proliferation of small round cells in the perivascular spaces. Thus the two lesions are of

diametrically opposite natures.

In regard to the difficulty of diagnosis, the person who occasionally finds himself unable to distinguish between the chancre and the chancroid will only be in a position which has been occupied by the most distinguished syphilographers. In certain cases a positive opinion must be withheld. He believed the induration of the chancre to be simply the first manifestation of the constitutional infection, the fact that it appears by preference there being due to the irritation set up at that point by the inoculation.

Dr. W. G. Porter read his paper on the "Mercurial Treatment of Chancre" (see

page 402).

Dr. John R. Packard inquired whether the lecturer regarded the specified period as the minimum for treatment, or he did not think it might be shortened under other methods.

Dr. Porter said that he began his experience in the treatment of syphilis by allowing secondary symptoms to make their appearance before the patients were placed on mercurial treatment. Experience shows that in altogether exceptional cases a patient having all the symptoms of the initial lesion of syphilis may escape almost entirely secondary or tertiary symptoms of the disease, but in the vast majority of cases in which local treatment alone is used for the initial lesion, in a period averaging three months from the first appearance of the chancre, secondary symptoms do appear, and appear in such a manner as not only to make the patient exceedingly uncomfortable, but also to expose his misfortune to his family and friends.

For a number of years, in accordance with the views of most modern syphilographers, he had placed all of his patients on mercurial treatment as soon as the diagnosis of true chancre was made, and the cases related tonight were fair samples of the results he had uniformly obtained. Salivation was always avoided, and the preparation generally employed was the protiodide in doses of from

one-sixth to one-half grain.

In some few cases, where the sore had been seen from the commencement, and the patients had been placed on treatment as soon as there was no doubt as to the diagnosis, there had been absolutely no secondary symptoms whatever. In others, the patients escaped with the minimum of syphilis,—a slight ulceration of the mouth or throat; an aborted mucous patch on the tongue; a very mild and transient eruption, - in fact, just sufficient symptoms to confirm the diagnosis. time devoted to the treatment varied from one to two years, and that cures were effected was proved by the fact that the patients could contract syphilis again, and that they could become the parents of healthy children. He had tried various plans of treating syphilis, but he knew of none which gave such good results as this.

Dr. Packard did not wish to cast any doubt upon the accuracy of the reports of cases just made, but thought that the adoption of any special course of treatment in a class of cases was likely to lead to routinism, and to a line of practice the reverse of scientific. He did not question the good results, in many instances, of the medication now advocated, but would urge that every case ought to be studied and treated for itself. We cannot say that if a man has a chancre the administration of one quarter of a grain of protiodide of mercury thrice daily for twenty months will cure him. No one plan of treatment will be invariably successful, or will suit any one case in every stage.

Iodide of potassium, with or without mercury, iron, other mineral or vegetable tonics, and in varying doses, seems to come nearer to the position of a specific, especially in the later periods of venereal disease, than any other remedy. But in all stages, and under all conditions, these affections demand careful watching and judicious changes of treatment, according to the varying circumstances which arise. In no other way can we arrive at the best attainable results.

Dr. C. B. Nancrede, although not denying the necessity of combining the treatment with tonics in certain complicated cases, mentioned the fact that Dr. Keyes had, in the American Journal of the Medical Sciences, demonstrated the fact that small doses of mercury increased the number of blood-corpuscles, and acted, even in health, as a decided tonic. The increase of red cells Dr. Nancrede had con-

firmed by observations of his own.

Dr. Packard, in reply to a question as to whether he relied upon the iodide in all the stages of syphilis, said that he thought that the iodide of potassium could be given in a larger number of cases, with good effects, than any other drug, in this condition. In the secondary stage, in certain cases, mercurial fumigations are beneficial; a change of treatment is sometimes needed, but the fumigations are, in his experience, the best way of exhibiting mercury. He could not believe that the majority of cases would derive advantage from the influence of mercury in the first stage.

Dr. W. R. D. Blackwood said that it appeared strange that such different results have been reported by physicians from the same remedies. While stationed at Huntsville, after the war, he had seen over three hundred cases of venereal disease. He put the men under treatment at once, as soon as the chancre appeared. He cauterized the sore, and gave corrosive sublimate, but did not see that it made the slightest difference. therefore could not understand Dr. Porter's cases. The iodide never did any good in the secondary stage, in his experience, but in the tertiary stage, in large doses, it was valuable. In the secondary form, good results were obtained by mercury in the form of corrosive sublimate.

Dr. Porter said that the object of the treatment was to prevent the constitutional manifestations of syphilis. Cases require all kinds of treatment. Some need tonics and others not; but he had long ago made up his mind that mercury is the best tonic, in proper doses, for syphilis. Even in cachectic cases he did not consider it contra-indicated, but had seen the best results from its use, in small doses, with hygienic treatment.

THE Italian government has prohibited the importation, from the United States, of pigs and pork, whatever preparation the meat may have undergone, in consequence of the supposed prevalence of trichinosis among swine in this country.

# REVIEWS AND BOOK NOTICES.

CYCLOPÆDIA OF THE PRACTICE OF MEDICINE. Edited by H. von ZIEMSSEN. ALBERT H. BUCK, editor of the American Edition. Vol. viii.: Diseases of the Chylopoëtic System. Vol. xiii.: Diseases of the Nervous System. Vol. xvii.: Disturbances of Nutrition; Poisons. New York, William Wood & Co., 1878.

Vol. viii. of Ziemssen's great work continues the consideration of those affections of the chylopoëtic system which were not treated of in vol. vii., namely, diseases of the œsophagus, peritoneum, spleen, pancreas, suprarenal capsules, bladder, urethra, and male genital organs. The nervous diseases treated of in vol. xiii. are those of the spinal cord and medulla oblongata. Professor Erb, of Heidelberg, has written this entire volume. Vol. xvii. describes a number of affections of great interest, and gathers together an amount of valuable information hitherto scattered about in various journals and volumes not easily accessible. Immermann's article on hæmophilia, scurvy, and purpura (for the latter he prefers the antiquated title of "morbus maculosus Werlhofii") are full of learning, and show much originality, not to say ingenuity, in hypothesis, particularly in his discussion of the pathogenesis of the several affections. Under the head of poisons, the toxic symptoms produced by fifty-two mineral and twenty-nine vegetable substances are related at length, together with the appropriate rem-

HEALTH, AND HOW TO PROMOTE IT. BY RICHARD McSHERRY, M.D., etc. New York, D. Appleton & Co., 1879. 12mo, pp. 185.

Dr. McSherry writes for the general public, and his genial pages, well garnished with polyglottic quotations and illustrated by the well-worn stories of former years, yet contain much of recent date, and are calculated to sugar-coat the hygienic information which the modern man is bound to swallow in some form or submit to the intolerable reproach of being "behind the time."

EPITOME OF SKIN DISEASES, WITH FORMULE, FOR STUDENTS AND PRACTITIONERS. BY TILBURY FOX, M.D., etc., and T. C. Fox, M.B., etc. Second American Edition, enlarged and revised by the Authors. Philadelphia, Henry C. Lea, 1879. 12mo, pp. 216

In preparing this edition of their *Epitome* for publication in the United States, the authors have increased the matter to about three times the original amount. The section regarding the pathology of the skin has been entirely recast, and the clinical descriptions of diseases have been amplified and occasionally

remodelled. The result is shown by comparison with the former edition, upon which this before us is a decided improvement. While we are not prepared to admit the advantages of such epitomes of skin diseases as a class, vet we have no hesitation in saying that this of the Drs. Fox is among the best of its kind. The results of late research in dermatology are duly chronicled, and in most points the little book, within its limits, gives a fair sketch of our knowledge in this branch of medicine. We could wish that in adding the new material it had been more thoroughly assimilated to the body of the text. Occasionally the various new points strewn here and there remind us of imperfectly compounded oxide of zinc ointment, with gritty particles through it. The additions by the American editor (pp. 48-53) are foreign to the general scope of the book, and, if inserted at all, should have been placed in the form of an appendix.

RHYMES OF SCIENCE; WISE AND OTHERWISE. New York, Industrial Publication Company, 1879.

We advise all our readers into whose souls the sunlight of fun ever enters to purchase this little book. "Making light of cereous things" has been said, by a high authority, "to be a wick-ed profession," but the genius which can balance the ponderosity of an ichthyosaur upon the delicate point of a euphonious rhyme, or bear aloft a bulky leptorhynchus on the sparkling foam of a soul-stirring love-ditty, is worthy—worthy of a purchaser.

DEMONSTRATIONS OF ANATOMY. By GEORGE VINER ELLIS. From the Eighth English and Revised Edition. Henry C. Lea, 1879.

The success of this old manual seems to be as well deserved in the present as in the past volumes. The book seems destined to maintain yet for years its leadership over all the English manuals upon dissecting.

# GLEANINGS FROM EXCHANGES.

Condurango Bark again.—I. von Dietrich reports the case of a woman, 49 years of age, who had suffered for ten years from pain in the stomach, for three years had noticed a tumor in the umbilical region, and who had been confined to bed for six months with all the symptoms of well-marked cancerous cachexia. After using the condurango for four weeks, the tumor was reduced to a quarter of its original volume, the patient again became able to work, and a month later only perceived slight hardening, and was otherwise quite well.—Practitioner; from Cbl. f. Chirurgie, 1879, No. 1.

NITRO - GLYCERIN AS A THERAPEUTIC AGENT.—Later experiments with nitro-glycerin seem to indicate that this is not so useful as was at first hoped. It has been mentioned as a remedy in angina pectoris, but it has much less power to lower the blood-pressure than nitrite of amyl, while it causes such severe headache, even in minute and indeed almost imperceptible quantities, that its investigation is by no means pleasant work, and it appears problematical whether its medicinal uses will be sufficient to counterbalance the pain it will probably inflict upon the patient.

Practitioner, 1879, p. 200. SALICYLATE OF SODIUM.—In a paper on salicylic acid and its compounds in rheumatism, Dr. Sharkey states his belief that salicylate of sodium is the best form of the remedy. Out of one hundred and fifty cases of acute rheumatism treated by Dr. Jacob with this drug, a markedly good effect was noticed in one hundred and three cases, forty-two could scarcely be said to be benefited or the reverse, and in five the effect was unfavorable. In no instance was delirium caused by the salicylate of sodium, although a sort of nervous irritability, restlessness, and rapid breathing appeared occasionally to be due to it .- Dublin Four .; from St. Thomas's Hospital

Reports.

CROTON CHLORAL IN NEURALGIA OF THE FIFTH PAIR.—Dr. Riddell gives the case of a lady who for years had suffered from attacks of severe headache, accompanied by a feeling as if an iron band were about her head. Every remedy ordinarily used in such cases was tried in vain, until croton chloral was given. This was administered in five-grain doses twice daily, and ten grains on going to bed, dissolved in spirits of wine and glycerin, with a little acid and syrup of orange to cover the flavor. The good effect of the drug was seen at once; the attacks came at longer intervals, and were less severe, then ceased altogether, and at the time of the report only two attacks, one brought on by mental anxiety, and one after ceasing the use of the drug, had occurred in seven months. She was taking five grains every evening, and was well and hearty at the date of the report. Dr. R. cites a number of similar cases likewise successfully treated with croton chloral. —Dublin Jour. Med. Sci., 1879, p. 346. NIGHT COUGH.—Dr. Reginald Thompson

describes a very persistent and harassing form of cough which accompanies many forms of pulmonary disease, which appears to be an undeveloped form of asthma. The patient complains of being much disturbed at night especially, or early in the morning, and it is generally worse when the patient lies down and goes to bed. No narcotics in ordinary use for cough appear to have any effect, and it is only by asthmatic remedies that any relief is obtained. In one case of this kind coming under Dr. Thompson's notice, Joy's cigarettes were used with good effect: in another, the burning of nitre papers relieved the cough after other remedies had failed .-

Practitioner, 1879, p. 176.

ACONITE IN ACUTE INFLAMMATION.—
Though aconite has been so much written about during the past few years, there are many cases where its advantages do not seem to be understood, and in which its more general employment might be introduced with profit. Mr. James S. Sparks draws attention to some of these. In pneumonia, according to Mr. Sparks, its abortive power is remark-If administered within a day or two after the symptoms are apparent enough to render the diagnosis certain, it will arrest the inflammation, and effect a cure in from one to three or four days, the beneficial effects being manifest from the very commencement of its administration: the pain begins to subside from the first, the skin becomes more moist, the beating more natural, and the patient appreciably better and more comfortable after each dose. The dose prescribed by Mr. Sparks in adults is five minims (Fleming's tincture) at first, and one or two minims every hour after, modifying the dose according to circumstances. If the patient be de-bilitated, it must be used cautiously. In bronchitis it does not seem to act so favorably. In cynanche tonsillaris he finds it extremely useful both as an abortive and as a controlling or modifying agent. If properly administered during the inflammatory stage, it seldom fails to cut the attack short, and if given at the very beginning, to abort it; Dr. Sparks even thinks it seems, after a time, to reduce the liability to quinsy in persons subject to periodical attacks of it. Ringer says that the good effects of aconite in the catarrhal form of croup are as conspicuous as in quinsy. Its use in fevers is well known. In erysipelas, especially in that form which occasionally follows vaccination, its effect is often astonishing, cutting short the attack in a few hours. At the beginning of a cold, when one feels it "through the bones," one or two drops of tincture of aconite taken at bedtime will enable a person in such a state to rise quite well in the morning.

A New Nerve.—In a communication to the French Academy, Cyon claims that the eighth pair of cerebral nerves contain two nerves of entirely distinct senses,—the auditory and the nerve of space ("Raumnerf"). He considers the latter the source of all our ideas of extension, and of the three dimensions of space.—

The Doctor.

TREATMENT OF PNEUMONIA AT BELLEVUE HOSPITAL.—Quinine in ten-grain doses twice daily, increased or diminished according to the fever, the oiled silk jacket, a coat of iodine on the side if there is much pain, and an absolutely recumbent posture, is all that is required in many cases. Sometimes aconite is given in one-minim doses every hour until some effect is

produced. The quinine is occasionally given in one- to five-grain doses hourly, and now and then by Jürgenson's method, forty grains at once, every day or so. Cupping is also employed, with the free use of stimulants. Cold sponging is occasionally useful; the cold bath, never.—New York Medical Record.

HYPODERMIC INJECTION OF HYOSCYAMIA.

—The following case, given by Dr. Leared, is of interest in connection with the administration of hyoscyamia, now proved to be a drug

of great sedative power:

A gentleman, the subject of phthisis, had morphia nightly injected subcutaneously on account of sleeplessness and a condition of general irritability. The quantity had been gradually increased, until a grain was reached. Wishing to break through the noxious habit, I substituted for the morphia one-fortieth of a grain of hyoscyamia. In less than ten minutes after the injection the patient complained of giddiness, with a sense of compression at the top of the head. In half an hour after the injection, some milk, recently swallowed, was vomited. Delirium now set in, the patient talked incoherently, and was with difficulty kept lying down. A curious effect of the drug was observed. Every object seemed much nearer to the patient than it really was. would grasp wildly at something invisible to the by-standers, and this, on inquiry, was found to be the bed-post, placed at a distance of about four feet from him. When a cup was handed to him he invariably tried to seize it at a point nearer than where it really was. He constantly caught at insects, with which he said the bedclothes were covered. pulse was quickened, but its volume seemed little altered. The pupils were widely dilated, and the sight so much affected that he was unable to read the address on a letter, even when the active effects of the drug were subsiding. The delirium and perversion of vision lasted upwards of four hours, after which time the compressed feeling in the head and obscurity of vision remained, and it was not until twenty-four hours afterwards that all sensations induced by the alkaloid had passed

away.—Lancet, vol. i., 1879, p. 475.

INJECTION OF WARM WATER INTO THE VAGINA IN CERTAIN CASES OF LABOR.—Mr. W. J. Kilner says that, although meddlesome midwifery is rightfully deprecated, yet any assistance which can be given without coming under this designation will be certainly appreciated not only by medical men, but also by the patients themselves. The examples given by him show how injections of warm water into the vagina in properly chosen cases accelerate the labor without causing any increase of suffering to the mother. The only instrument required, besides a bowl of warm water, is a Higgins syringe fitted with a vaginal tube; but this apparatus can be improved by the addition of a yard of india-rubber tubing three-eighths of an inch in diameter,

joined to the vaginal tube so as to carry off the water direct from the vagina into a receptacle, thus avoiding wetting the bed. The water should be as warm as the patient can comfortably bear, and in practice it is advisable not to begin with water raised to the full temperature, but gradually to add boiling water until the temperature of about 105° F. has been attained. The injection requires to be continued from five to twenty minutes, according to circumstances. But there is one thing which must be borne in mind, that, unless the injection be given with a due regard to temperature, it is totally useless; so that, to avoid disappointment, it is better to administer it oneself rather than to leave it to a nurse, unless she can be fully relied upon. The effect caused is the relaxation of the maternal soft parts, and sometimes in addition the labor pains seem to be increased. Besides this, the patients generally say that the injections make them feel more comfortable. The cases to which this treatment is specially applicable are those in which the os uteri is thin and rigid and the perineum unyielding.-Lancet, vol. i. p. 439.

THE PREVENTION OF RELAPSES IN TY-PHOID FEVER.-Dr. Immermann shows that we are to a certain extent able to prevent relapses in typhoid fever by the internal administration of salicylate of sodium. His observations seem to indicate that these relapses must be traced to a residuum of typhoid poison in the bowel of the patient, by which, after a time, he becomes re-infected. If this theory be correct, the obvious inference is, as Immermann says, that we should systematically disinfect the body of a typhoid convalescent. Following out this reasoning, Immermann treated twenty-two such convalescents with a drachm to a drachm and a half of salicylate of sodium for ten or twelve days from the first day of normal temperature, Of these patients only one relapsed, on the seventh day of the apyretic period, owing to neglect of attention to diet. Other experiments gave similar results. These facts tend to prove that not only convalescents from typhoid fever, but also healthy persons exposed to the contagion of typhoid, should be treated with salicylate of sodium .- Med. Times and Gaz., vol. i., 1879, p. 323; from Corresp. Blatt

f. Schweiz. Ærzte.

# MISCELLANY.

DEATH OF PROFESSOR GUBLER.—This celebrated French therapeutist, whose real name was Goblet, died recently at Paris at the age of 58. He was the author of numerous memoirs on various medical subjects, but is best known as founder of the Journal de Thérapeutique, and author of a work entitled A

Therapeutic Commentary upon the Codex. Having been a native of Alsace-Lorraine at the time of its annexation to Germany, "he revenged himself," says his biographer in La France Médicale, by delivering in 1872 a course of lectures on the comparative values of German and French mineral springs, in which, as may be imagined, the waters of Germany fared badly.

ONE cannot be too explicit in giving advice to the less intelligent class of patients. Punch has a picture of a village doctor in his "surgery," with a forlorn-looking countryman just come to report the result of a week's treatment. The dialogue is as follows:

Village Doctor.—"Well, are you better?

Have you taken your medicine regularly, and

eaten plenty of animal food?"

Patient.-" Yes, sir, I tried it; and so long as it were be-ans and o-ats I could manage pooty well, sir, but when you come to that there chopped hay, that right-down choked

me, sir.'

CORNS.—M. Guibout's treatment is to soften the corn by applying to it, for one night, an ointment consisting of turpentine and acetate of copper, each one part; white resin, two parts; and yellow wax, four parts. The corn should then be excised with scissors, care being taken to go deep enough to remove its summit. After excision, the matrix should be cauterized with sulphuric acid, else the corn will be reproduced.

FIAT EXPERIMENTUM, ETC.—Amid the excitement and discussion over the supposed trichinous American pork imported into England, cheering news has been sent to that unhappy country in the shape of the following item: "Dr. Belfield, one of the experts sent to the Chicago market to examine the diseased pork, is convinced of the innocuousness of small numbers of the worms. Experimenting on himself, he swallowed twelve live trichinæ, Dr. B. has not, he declares, experienced any unpleasant symptoms to date.

"OLD PHYSIC."—Waterton, an eccentric and amusing traveller, whose "Wanderings in South America," first published fifty years ago, has just been reissued, gives the followago, has just been reissued, gives the following advice to those desiring to follow in his footsteps: "Shouldst thou ever wander through these remote and dreary wilds, gentle reader, forget not to carry with thee bark, laudanum, calomel and jalap, and the lancet." He not only carried them, but used them on himself. He told a friend he had bled himself upwards of one hundred and fifty times, and he would often take as much as twenty or twenty-five ounces from his emaciated but vigorous body, and follow up the bleeding with twenty grains of jalap, mixed with ten of calomel. No wonder that in South America the vampire bats would never touch him, though he was eager for the experience, and used to leave his foot outside his hammock to tempt them.

# NOTES AND QUERIES.

THE LATE DR. WOOD.

THE LATE DR, WOOD.

The very graphic sketch by Dr, Hunt in the last number of the Medical Times has recalled to my memory some traits of Dr. Wood's character and some incidents in his life which may not be uninteresting.

Among the former was his wonderful accuracy, not only in everything he did, but also in everything he said. He had a remarkable perception of the fitness of words, which he never lost sight of. Thus, those of us who belonged to his private class were always spoken of as his office pupils, never as his office students, and in later years two of us became, not his assistants but his acids.

private class were always spoken of as his office pupils, never as his office students, and in later years two of us became, not his assistants, but his aids.

So, too, in our class examinations, we were early taught to keep to a sound form of words. Spirit of nitre, not spirits, syrup of squill, not of squills, were among our earliest lessons.

This accuracy of language is admirably shown in his great work on the "Practice of Medicine." As has been suggested,\* modes of treatment may vary, and those given in his book may give way to later ones, but his descriptions of diseases can never become obsolete or antiquated.

What, for example, can be more completely descriptive than his account of "Enteric fever"? What more picturesque than his sketches of Pernicious fever and of Asiatic cholera? And, in this connection, it should be said that it is a great mistake to suppose he was but the compiler of other men's labors. Though not a physiological investigator, he was a most careful observer of disease, and a profound reasoner.

This is shown in the essays on rheumatism and gout, where, especially on the subject of nervous gout, are presented views which at the time were entirely novel, and which were original with Dr. Wood. These were first published in the year 1847. Twenty years later, Dr. Wood read, with gratification and amusement, in a London journal, from the pen of an eminent English physician, an essay in which the same truths were enunciated, but as new and as original with the English author!

The same care was observed with his lectures; to the last

The same care was observed with his lectures; to the last The same care was observed with his lectures; to the last the notes of the lecture to be delivered next day were carefully read over by him the night before, and again immediately before going out in the morning. A schedule of the illustrations to be used in the lecture was furnished by him every morning to one of his "aids," in the order in which they would be needed, and these were carefully supervised by him before they were sent into the lecture-room.

would be needed, and these were carefully supervised by him before they were sent into the lecture-room. His kindness to the younger members of the profession was a marked trait of his character,—the value of that kindness enhanced by his delicacy in conveying it. There lies before me a note bearing date October 13, 1852, enclosing his check for a considerable sum, with these concluding words: "which I beg you to accept, not as a compensation for your services to my private class this summer and fall, but as some little acknowledgment of your kindness." Perhaps few men of his age would have taken the trouble to confer a favor on so young a man in so kind and delicate a manner. Indeed, with all who were in any way engaged with him his payments were most liberal. As in his relations with him payments were most liberal. As in his relations with his pupils the question with him was not how much he should get from them, but how much they might get from him, so with those who "aided" him in the lecture-room or elsewhere; he made the compensation from the valuation of his own busy hours rather than from theirs, which were so much less occupied. If in Dr. Wood there was absent that warmth of manner—bonhommie, empressement, or whatever it may be called—which at the first introduction is so captivating, its absence was largely made up for by his sincerity and truthfulness. We knew that every word he said was a true one; and if he did not at once win our love, he very soon commanded our grateful respect and esteem. Tennyson's words applied to him always:

"And thus he bore without abuse

him always:
"And thus he bore without abuse
The grand old name of gentleman."

Dr. Hunt has alluded to his generous hospitality; this was indeed princely. Few who were there can ever forget the entertainment given by Dr. Wood on the occasion of the meeting of the National Medical Association in Philadelphia in May, 1855. Not only was ample provision made in his house for the comfort and entertainment of his guests, but his large and beautiful garden was thrown open to them. It was a balmy evening in May, and a bright moonlight one. The scene was one of rare beauty. Scattered about the grounds were numerous native and foreign plants,—roses just coming into bloom; larger and smaller p-lm-trees; little beds of belladonna, aconite, hyoscyamus, and digitalis plants; while Chinese lanterns suspended from the trees, and colored lamps placed lsewhere, all height ned the beauty of the place. At the extreme end of the garden were the conservatories, brilliantly lighted and fragrant with perfume. As in the Dr. Hunt has alluded to his generous hospitality; this was

<sup>\*</sup> Medical Times, vol. ix. p. 356.

King's garden in old John Bunyan's Land of Beulah, "here

King's garden in old John Bunyan's Land of Beulah, "here also grew camphire, with spikenard and saffron, calamus and cinnamon, with all trees of frankincense, myrrh, and aloes, with all chief spices." No wonder that his delighted guests exclaimed, as again and again they did, "We are in the tropics,—surely we are in the tropics!"

In pursuance of a resolution he had formed when accepting the chair of practice, Dr. Wood delivered his last lecture in the University at the close of the winter of 1860. He was 63 years old, with his eye undimmed and his mental vigor unimpaired. I recall the day distinctly, and what preceded and what followed the lecture. He evidently felt keenly the severance of the old tie which had so long bound him to the University. We begged him to reconsider his decision, which we hoped was not yet irrevocable, telling him, what was true, that his health was as good as, if not better than, it had been for years, and one of us playfully adding, "When we motice any failure of your powers we will tell you."—"Would you have me," said Dr. Wood, "repeat the old story of the Archbishop of Granada and Gil Blas, and, some few years hence, say of you, 'I once had great confidence in my young friends' judgment, but I now find it is not what it then was!"

The last lecture was given, and was a brilliant one. If his sun was that day to go down, Dr. Wood had determined that it should go down with brightness, and it did so; and they who heard him heard him with real sorrow that they should hear him there no more. Immediately after the lecture, Dr. Wood, with his two "aids," withdrew into his private room. He was evidently much affected. Raising his outstretched hands, and then gradually lowering them, he said, "Now I go down, down, Down."

It was, I think, on this occasion that he said, "The happiest time in a man's life is not when he has risen to great eminence in his profession, but when he is conscious that he steadily is rising."

steadily is rising.

eminence in ins procession, but when he is consistent in steadily is rising."

For some years after this, as is well known, Dr. Wood continued to write, supplying the demand which still existed for new editions of his books. Many a time, in the small hours of the night, has the writer of this passed by his house, and, through the partially-closed shutters, seen his more than midnight lamp burning. Here was Dr. Wood, then far, far advanced in years, toiling over his books,—not for wealth, of which he had long since reached; but for the guidance and help of his younger professional brethren, and for the relief of the sick and the suffering of his fellow-men.

Surely the profession and the community owe to the memory of such a man a debt of gratitude which cannot be too fully paid.

James J. Levick.

1200 ARCH STREET, May 6, 1879.

#### OFFICIAL LIST

- OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY FROM MAY 4 TO MAY 17, 1879.
- Sutherland, Charles, Colonel and Surgeon.—Granted leave of absence for five months on Surgeon's certificate of disability. S. O. 105, A. G. O., May 3, 1879.
- McParlin, Thomas A., Major and Surgeon.—Relieved from duty in Department of the East, and assigned to duty as Attending-Surgeon in New York City. S. O. 111, A. G. O., May 10, 1879.
- PAGE, CHARLES, MAJOR AND SURGEON.—Relieved from duty in Department of the Platte, and assigned to duty as Post-Surgeon at Fort Monroe, Va., and to report by letter to Commanding General Department of the East. S. O. 114, A. G. O., May 14, 1879.
- Moore, John, Major and Surgeon.—When relieved by Surgeon Smith, to proceed to New York City and report, on arrival, by letter to the Surgeon-General. S. O. 114, c. s., A. G. O.
- SMITH, J. R., MAJOR AND SURGEON.—When relieved at Fort Monroe, Va., by Surgeon Page, to report to Commanding General Department of Texas for duty as Medical Director. S. O. 114, c. s., A. G. O.
- Town, F. L., Major and Surgeon.—Having reported in person at these Headquarters pursuant to S. O. 58, c. s., A. G. O., assigned to duty at Fort Walla Walla, W. T. S. O. 49, Department of the Columbia, May 1, 1879.
- Storrow, S. A., Major and Surgeon.—Granted leave of absence for one month. S. O. 38, Department of the Platte, May 5, 1879.
- Wolverton, W. D., Major and Surgeon.—Relieved from duty in Department of Dakota, to proceed to New York

- City, and, on arrival, report by letter to the Surgeon-General. S. O. 114, c. s., A. G. O.
- GIBSON, J. R., MAJOR AND SURGEON.—Relieved from duty in Department of the Platte, to proceed to New York City, and, on arrival, report by letter to the Surgeon-General. S. O. 114, c. s., A. G. O.
- Bartholf, J. H., Captain and Assistant-Surgeon.— Relieved from duty at Alcatraz Island, and assigned to temporary duty as Post-Surgeon at San Diego Barracks, Cal. S. O. 44, Division of the Pacific and Department of California, April 28, 1879.
- evallo, C., Captain and Assistant-Surgeon. Relieved from duty in the Department of the Missouri, to proceed to Washington, D. C, and, on arrival, report by letter to the Surgeon-General. S. O. 114, c. s., A. O. O.
- MOFFATT, P., CAPTAIN AND ASSISTANT-SURGEON.—Relieved from duty in the Department of the East, and assigned to duty in the Department of the Columbia. S. O. 114, c. s., A. G. O.
- RARY, P. J. A., CAPTAIN AND ASSISTANT-SURGEON.— Relieved from duty in Department of the Missouri, to proceed to New York City, report to the Army Medical Board for examination for promotion, and, upon its con-clusion, report by letter to the Surgeon-General. S. O. 114, c. s., A. G. O.
- Munn, C. E., Captain and Assistant-Surgeon.—Relieved from duty in Department of the Platte, to proceed to Boston, Mass., and, on arrival, report by letter to the Surgeon-General. S. O. 114, c. s., A. G. O.
- Dickson, J. M., Captain and Assistant-Surgeon.—Relieved from duty at Fort Klamath, Oregon, and assigned to duty at Fort Stevens, Oregon. S. O. 47, Department of the Columbia, April 29, 1879.
- EWEN, C., CAPTAIN AND ASSISTANT-SURGEON.—Relieved from duty in Department of the East, and assigned to duty in Department of the Missouri. S. O. 114, c. s., A. G. O.
- WINNE, C. K., FIRST-LIEUTENANT AND ASSISTANT-SUR-GEON. Relieved from duty at Fort McPherson, and assigned to duty at Fort Washakie, Wyo. T. S. O. 38, Department of the Platte, c. s.
- Paulding, H. O., First-Lieutenant and Assistant-Sur-Geon.—Relieved from duty in Department of Dakota, to proceed to Washington, D.C., and, on arrival, report by letter to the Surgeon-General. S. O. 114, c. s., A. G. O.
- ADAIR, G. W., FIRST-LIEUTENANT AND ASSISTANT-SUR-GEON.—Relieved from duty in the Department of Texas, to proceed to Utica, Mich., and, on arrival, report by letter to the Surgeon-General. S. O. 114, c. s., A. G. O.
- Semig, B. G., First-Lieutenant and Assistant-Surgeon.
  —Relieved from duty in the Department of the South, and assigned to duty in the Department of the Platte. S. O. 114, c. s., A. G. O.
- WILCOX, T. E., FIRST-LIEUTENANT AND ASSISTANT-SUR-GEON.—Upon expiration of his present leave of absence, to proceed to Vancouver Barracks, W. T., and report to the Commanding General Department of the Columbia for assignment to duty. S. O. 114, c. s., A. G. O.
- WORTHINGTON, J. C., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—Relieved from duty at Fort Grant, A. T., and to report by letter to the Medical Director of the Department for special duty. S. O. 50, Department of Arizona, April 23, 1879.
- RILL, H. S., FIRST-LIRUTENANT AND ASSISTANT SUR-GEON.—Relieved from duty in Department of Texas, to proceed to Boston, Mass., and, on arrival, report by letter to the Surgeon-General. S. O. 114, c. s., A. G. O. TURRILL. H.
- BIART, V., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.— Granted leave of absence for thirty days, with permission to apply for an extension of thirty days, on Surgeon's certificate of disability. S. O. 88, Department of the Missouri, May 5, 1879.
- LA GARDE, L. A., FIRST-LIEUTENANT AND ASSISTANT-SUR-GEON.—Relieved from duty in Department of the East, and assigned to duty in the Department of the Missouri. S O. 114, c. s., A. G. O.
- RANDOLPH, J. F., MAJOR AND SURGEON.—Having been found, by an Army Retiring Board, incapacitated for active service, he is granted leave of absence until further orders, on account of disability, to take effect May 1, 1879. S. O. 108, A. G. O., May 7, 1879.

# PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, JUNE 7, 1879.

# ORIGINAL LECTURES.

CLINICAL LECTURE

ON SOME PRACTICAL POINTS IN THE STUDY OF BRONCHITIS, AND PARTICULARLY OF THE ACUTE CATARRHAL VARIETY.

(Delivered at the Bellevue Hospital Medical College.)

BY BEVERLEY ROBINSON, M.D.,

Lecturer upon Clinical Medicine.

BRONCHITIS, as its name implies, is an inflammatory disease of the bronchial tubes. Its seat is the mucous membrane covering these structures. It may at times extend beyond them, and affect the trachea, larvnx, and pharvnx. Sometimes it attacks more particularly the largeor medium-sized bronchi; again it becomes fixed, as it were, from its initial stage in the capillary air-passages. Rarely the whole respiratory tract is implicated at the same time, although there are many regions where its intensity is specially manifested. Usually this intensity will in a measure depend upon the extent or area which marks the morbid processes. time and stages through which it lasts are variable, and nothing can be absolutely predicated in advance of the turn it may take. Just as the terminations of the disease are numerous, so are the influences which give rise to it. Each case of bronchitis is not, surely, similar to another; it may differ essentially; and we have distinguishing features to which we attach different names, in order to separate distinct forms. An attack of bronchitis may be very rapid in its onset, with irritating cough and high fever. Thus, we have acute bronchitis. This latter may be established in the first divisions of the bronchi, or else it may be speedily propagated to the capillary air-passages. It is catarrhal in nature, and primary,-viz., follows no other disease,—and is determined by the usual causes which produce cold. But under certain circumstances it may tend to become lasting, and degenerate into the chronic variety of this disease. Those instances of bronchitis following in the wake of the exanthemata and other febrile diseases are apt to be of this type.

There is also a rare form of bronchitis,

in which the exudation is fibrinous in char-On account of its great relative infrequency, it has been less exhaustively studied than the other forms. Its history and march are usually somewhat obscure. whilst its duration is considerable. I have brought a specimen to show you, which was sent me by a medical friend, some time since, as a great curiosity. You will remark that, except for its white color, you might suppose you saw before your eyes a bronchus with all its minute subdivisions. so perfectly is it preserved. This specimen was expectorated by a small child, and such masses are said to have been thrown off every third or fourth day, for more than a year, without notable interference with the general health. All ordinary remedies were tried, and proved wholly unsuccessful in ameliorating the symptoms.

Bronchitis of the acute catarrhal type is encountered at every age of life. Owing, doubtless, to a less degree of resistance to external impressions caused by sudden atmospheric changes, the very young and the aged are specially predisposed to contract it. When this is the case, it is apt to extend itself in the direction of the smaller tubes, and thus becomes a most menacing affection, even to life itself. The vigorous constitution is not so often attacked as the one which is undermined by ill health or a dissipated life. In like manner, breathing a pure, elastic atmosphere wards off the disease, when close, confined chambers, or the air of factories and workshops, bring it on or root it firmly when once the organism has been subjected to the bad influences of excessive fatigue and exposure to draughts of How much sudden changes from cold to warmth, or from a heated atmosphere to one that is chilly, are to be dreaded, each one among you knows as you know any axiom of life. But you have not, perhaps, thought how immediately chilling of the surface drives all the blood which courses through our integument down deep in the visceral structures, which soon are clogged in their circulation and become congested to a greatly increased degree. At one time a patient is attacked after this manner with bronchitis; at another he may have equally well an inflammation of the parenchyma of the lung itself (pneumonia). To many authors the causes named are not always sufficient to occasion an attack of acute They still hold fast to the bronchitis. ancient doctrine of special morbific agents contained in the ambient atmospheric And certainly at times when bronchitis is epidemic, when people are attacked by it on all sides, there can scarcely be a doubt that there is "a contagium" in the air we breathe. But I am loath to believe this is true of sporadic cases, which I consider sufficiently explained by a sudden stoppage of physiological function in an important organ like the skin. Acute bronchitis may, and often does, follow those diseases in which blood-poisoning is so manifest. Here we can but suppose that the loss of vitality, or advnamia, of the patient, is for much in

its development. As I have shown already, in a paper read before the Academy of Medicine,\* nothing is more frequent than congestion and inflammation of the respiratory mucous membrane following acute cardiac Authors do not, it seems to me, pay sufficient attention to these facts, or, if some of them have signalled the bare facts in a few arid remarks, they have not recognized the importance of a special drug (digitalis) in keeping up heart-action and thus preventing the stagnation of blood in the lung-tissue. Of course I am not ignorant of the well-known descriptions of lung-complications (bronchitis, cedema, pneumonia, etc.) following old cardiac troubles, but it is to their acute forms that I would point with warning, as leading to serious consequences in the lungs, unless they are avoided by timely and proper Lastly, therapeutical interference. speaking of the causes of acute bronchitis, I would not have you ignore what an essential factor in causing it chronic lungaffections are; notably, emphysema stands forth. In our hospitals and dispensaries, how numerous are the patients who come to us with acute congestion of bronchial mucous membrane grafted upon a lung whose air-sacs and alveoli are very generally expanded and have lost nearly all their original elasticity! Such cases are difficult to treat successfully, and will make demands on all the resources of your curative armamentarium. The generallyreceived idea among beginners in medicine is that bronchitis attacks the bronchial tubes immediately when cold is taken. This is not a correct view, since it is much more frequent to find the nasal passages, pharvnx, and larvnx sore and inflamed several hours before the bronchial tubes are touched at all. When they are affected, the mucous membrane soon becomes red and swollen; it loses in part its consistence, and seems softer than normal. The bronchial tubes, at first, contain a moderate quantity of clear mucus, mixed with foam, if the cough is severe; later on the discharge becomes yellowish or green, and contains a greater or less quantity of pus-cells. It is rare to find the tubes on one side of the chest intact and the other side of the chest in healthy condition. In general, the inflammation is nearly symmetric, and marches equally on both sides. Hence it is always a suspicious circumstance, in auscultation of the apices of lungs, to find moist râles on one side and not on the other (phthisis?). Habitually, as I have stated, the bronchial tubes are inflamed in acute bronchitis, but instances have been observed in which there was abundant secretion and vet no visible signs of inflammation. In these examples the sole evidence of a morbid condition consists in the hyper-secretion

Emphysema is, as I have said, a frequent accompaniment of acute bronchitis, and would appear as if it existed prior to the attack, and was in some degree responsible for its appearance. But this is not by any means the whole relation of these diseases to each other; for, just imagine, gentlemen, that the bronchitis has taken hold of previously healthy lungs, and that the secretion has become not only abundant, but also viscous. One or more pellets of this thick, sticky secretion block up partially a small bronchial division here and there, and, whilst the inspired current has sufficient force to pass beyond it into the air-sacs, these air-sacs cannot in their turn expel entirely their contained volume of air during expiration and before a fresh column of air is again drawn into the lungs. This being the case, the sac and alveolar walls lose a portion of their elastic power at first, and finally give way or expand notably. The result is a manifest formation of more or less vesicular emphysema. If atelectasis be produced, it is effected in rather a different manner: a plug of inspissated mucus becomes tolerably well

<sup>\*</sup> September 20, 1877.

fixed in a bronchus of small calibre: in a brief period the expiratory movement pushes the pellet of mucus onward towards a somewhat larger bronchus. - but this progress is only a very slight one, by reason of the size of the bronchus and the facility with which the air passes by the side of it. The reverse or inspiratory current acts differently and more effectively, for it pushes the pellet of mucus farther and farther into a small subdivision of the bronchus at each successive movement, until finally it is lodged firmly or immovably in the tube and the indrawn air is arrested and cannot pass beyond it. An evident and necessary consequence is the production of atelectasis, or falling-in of lung-cells of the region in question. In adults the extension of acute bronchial inflammation usually stops with the minute bronchial tubes and does not go beyond. Then we may have localized or generalized pulmonary congestion or ædema, but not lobular pneumonia. In the case of children the inflammation may extend itself even to the alveoli, and nodules of catarrhal pneumonia distributed throughout the lungs are only too frequent at these

Let us now turn to the initial stage of an attack of bronchitis of acute type,i.e., ordinary cold,—and see how it progresses and how it may be differentiated with other conditions resembling it. first symptoms are usually those of an inflammatory affection of the nasal passages, throat, and larynx, rather than what relates directly to the subsequent chest-The pituitary membrane is red and swollen; there is congestion of the pharvnx, and soreness upon swallowing; and there is also a moderate degree of hoarseness. With these local symptoms, the patient complains of chilly sensations; of dull aches and pains in the back and limbs; of constriction over the anterior chest-walls; and of a feeling of increased warmth. The pulse is accelerated, and, by the use of the thermometer, a moderate elevation of temperature is shown. So soon as the larvnx becomes involved, As the trachea and cough declares itself. large bronchial tubes are attacked, the cough is still more frequent and harassing. with difficult or absent expectoration. The cough is often paroxysmal in character, and after each attack of it the patient has great soreness under the sternum,

and not infrequently over the epigastric region, and even lower down in the abdomen. The respirations are frequent and labored, and there is more or less dyspnœa, owing, no doubt, to the dry and swollen condition of the entire upper portion of the respiratory mucous surfaces. At first, when a physical examination of the chest is made, the respiratory murmur is simply found more feeble than normal. and there may be a few scattered, dry rhonchus. The chest-movements are restricted, and there is increased abdominal elevations whenever air is inspired. Palpation and percussion are incapable of revealing any satisfactory signs. It has been said the interscapular region is duller than usual at this stage; but this is not a sign which is to be relied upon, as it requires much faith to be satisfied of its presence. The same may be affirmed of vocal resonance, which only presents very delicate shades of difference with that degree which normally exists. At a more advanced stage (or the period of coction, as it was called by the humorist pathologists of a bygone era) the sputa become more abundant, and change their physical characters. They first assume a yellowish coloration, and are of thicker consistence; finally they are green, which indicates a greater number of pus-corpuscles contained in their substance. These are readily revealed by the microscope, which also shows effete epithelial cells and mucous corpuscles in large number, together with some stray red globules. At this stage, if the ear is applied to the chest, either in front, under the clavicles, or posteriorly, over the regions covered by the scapulæ, a large, though variable, number of moist râles, of all sizes, are easily heard. noise arising from the continual passage to and fro of the air over this secretion is such as at times to be heard at several feet distance from the patient's body, and the breathing during sleep may then become what is termed stertorous, such as is present after an apoplectic attack.

The only two affections with which an acute attack of catarrhal bronchitis of the large tubes might possibly be confounded are pleurisy and pneumonia. In neither of these diseases, however, do we have the prodromic symptoms upon which I have insisted; and when the disease becomes established, the absence of dulness on percussion, loss of thoracic vibrations,

œgophony, and increased dimensions of one side of the chest, are sufficient signs to distinguish an ordinary cold from the former; whilst from pneumonia, the characters of the sputa, the absence of increased thoracic vibrations, of tubular breathing, and bronchophony, etc., should be all that is required to separate it from pneumonia of croupous or even catarrhal character. An attack of ordinary cold lasts from a few days to several weeks, depending upon the care given to its hygienic and remedial treatment, and likewise to the constitutional peculiarities of the individual attacked. Frequently repeated, such attacks will finally lead to some permanent thickening of the mucous membrane, and to more or less constant secretion from this surface. Furthermore, we may have, as an ultimate sequela of prolonged and successive inflammations, on the one hand some dilatation of the extremities of the terminal bronchi, or, on the other, infiltrated spaces, through which there is decided stenosis of the tubes, from outward pressure and internal thickening. except in very young people or those advanced in life, ought an attack of acute catarrhal bronchitis to be a direct efficient cause of death. If it were so, it would indicate, as a rule, either great ignorance on the part of the physician or woful imprudence in the patient; and yet I regret to state that from neglected and badly-treated colds spring the greater number of those instances of catarrhal phthisis, followed by secondary tuberculous formations, which constantly augment the mortality of our large cities and towns. In the country the recuperative energies are so great, in the midst of purer atmosphere and a more natural existence, that the organism resists those influences which, with different surroundings and different habits, frequently prove fatal.

The old form of treatment of a cold was a Dover's powder at bedtime and a saline purge in the morning, and, if this treatment did not cut short an attack, it was followed by abundant doses of diuretic and diaphoretic mixtures, to make the kidneys and skin do their full share of elimination and at the same time withdraw an overcharge of blood from the bronchial mucous membrane. Occasionally inhalations were added, and the head of a too confiding adult was entirely covered under a hood or light woollen blanket,

and then steam from a jug filled with boiling water was slowly inspired so long as it could be endured.

Now, it appears to me that within a few years such treatment has been notably improved, both in regard to efficiency and in regard to comfort. I therefore desire to inform you of what the improvement consists.

The drug above all others which is most useful in an attack of acute bronchitis is carbonate of ammonia, -an alkali, gentlemen,-and yet not at all given because there is suspicion of latent gout, upon which the attack is dependent. No. it is given simply because it acts efficiently. without causing headache, anorexia, or constipation to the patient,—as a large dose of opium does; and, if taken regularly from the beginning of the attack, will, in my opinion, do better service than almost any other remedy. The ammonia must be given frequently, and in tolerably large doses, in some bland fluid, as mist. acaciæ or orgeat syrup. From three to five grains every two hours is an adult dose of sufficient amount to abort many attacks of cold, if taken when the patient first begins to have tickling in the nose and frequent sneezing. If the attack is allowed to continue its march without being altered by remedial treatment, the carbonate of ammonia will help it wonderfully during twenty-four to thirty-six hours, but will not be likely to check entirely its development and progress. If there is much pain in the pectoral region, very small doses of morphine (of which the bi-meconate salt is the least likely to diminish appetite) should be combined with the ammonia. If this salt is not readily procured, tinctura opii deodorata may be added in one- to three-drop doses. Just enough anodyne is useful to lessen somewhat local irritation of the inflamed mucous membrane, without at all diminishing the facility with which secretions may be expelled from the chest and throat. After thirtysix hours the ammonia must be temporarily stopped, on account of its secondary effects, which are depressing; and if its employment appears desirable, after a lapse of a few days' interval, it may be given in the same doses, and for the same length of time, as at first. Aconite is a noble remedy, if properly used, in all forms of acute cold, and particularly in the treatment of acute catarrhal bronchitis. It should be

given frequently, but in small doses; onefourth of a drop of the tincture every hour is quite enough, and after six or eight doses are taken the intervals may be lengthened. In giving aconite, especially after the indications contained in Ringer's Therapeutics, you must always remember that our tincture of the root is three times the strength of that contained in the British Pharmacopœia, and should not, therefore, be given in as large doses. Moreover, whilst I fully recognize the important action of aconite in lessening the extent and intensity of inflammatory changes, I believe it always well to have in view its effects upon heart-action, which vary so much in different individuals. does depress the movements of the heart and lessen the vigor of its contractions, no one, I venture to say, doubts; and this effect, in so far as the heart is concerned, is not what we have need of to get rid of an inflammatory condition where stagnation in capillary blood-vessels plays an important rôle. Nevertheless, when combined with carbonate of ammonia its injurious action is felt less, or not at all, and thus adjoined it should be given.

According to Dobell, of London (from whose writings I first borrowed many of my ideas of the employment of aconite and ammonia in the internal treatment of colds), aconite is particularly useful in instances in which the attack of bronchitis is accompanied by asthmatic attacks. This I believe to be true, although in my own experience Hoffman's anodyne is then more recommendable, as it seems to lessen the spasm of the bronchi without exercising any deleterious effect whatsoever. I have rarely, if ever, procured any very lasting good effects from the use of iodide of potash in the treatment of acute catarrhal bronchitis, and I am entirely satisfied, unless the iodide be given in very small doses (two to five grains every six hours), it will, in almost all but specific cases, do positive injury. Not long ago I was called, in an urgent manner, to see a patient with an acute attack of bronchitis and an accentuated asthmatic tendency, to whom I had prescribed five grains of iodide of potash, combined with 3ss doses of sp. æth. comp. three times in twentyfour hours. On my arrival, and though my patient had taken but three or four doses of medicine, I found her eyes and nose much inflamed and painful, and her breathing, instead of being improved was decidedly worse. The only real way in which the iodide may be useful is by producing a moderate artificial inflammation first of all in the nasal passages, and thus relieving the congested bronchial membrane. But if, unfortunately, its action goes beyond a certain degree, then we see artificial inflammation of this membrane take place, and there is no longer a useful derivative influence exercised, but merely an increase of the distressing symptoms we desire to ameliorate.

There is one other internal remedy, to be given by the stomach, which will do you good service whenever the mucous secretions become too viscous, and are detached with difficulty and after painful and tiresome cough. The drug I desire to mention is chloride of ammonium, -the one rendered so famous by its use in certain

forms of neuralgia (Anstie).

Well, gentlemen, it is an excellent remedy, and you may give it in doses of fifteen to thirty grains with decided benefit. has a saline pungent taste which, to some patients, is objectionable, and, if so, may be disguised successfully by a small amount of fluid extract of liquorice incorporated with each dose.

There is, gentlemen, a proprietary remedy which has been sold widely in this city, and achieved considerable notoriety, and is said to work wonderful cures in all cases of acute cold. The one I allude to is bronchine. Well, now, in order to take away all mystery from this panacea, allow me to inform you that its principal ingredients are Epsom salts, spirit of Mindererus, syrup of lemon, and water, united in such proportions as to make up a tolerably palatable mixture. The following is its exact formula, as given to me by an excellent pharmacist:

> R Magnesii sulph., Zi; Liq. ammonii acet., 3i 3ii; Syrupi limonis, Aquæ, āā 3ij.—M.

S.—A tablespoonful every three or four hours.

Here we have a saline combined with a diaphoretic, or diuretic (according to circumstances), and which acts well, as I have had many occasions to verify. Still, it is simple,—very simple,—and, shorn of its spurious reputation, would only be included among numberless other mixtures neither much better nor much worse.

Rarely, in cases of an attack of acute catarrhal bronchitis, do I make use of a counter-irritant to the chest-walls. not essential, and merely causes inconvenience to the patient without any special return in the way of increased rapidity of When the cold in the head, at the beginning of an attack of bronchitis, is excessive and annoying, the snuff-powder of Ferrier, composed of bismuth and gum, with a less quantity of morphine than he recommends, will be found rather useful in lessening mucous congestion. But let me say here that the carbonate of ammonia will do it far better, and by its use alone the patient will find his nasal passages becoming speedily much clearer; and in some instances the effects are really remarkable.

In another lecture I shall have an opportunity of speaking of the march and treatment of chronic bronchitis.

## ORIGINAL COMMUNICATIONS.

## THEVETIA ICCOTLI AND ITS GLU-COSIDE.

BY DAVID CERNA, M.D.

(Continued from page 397.)

LOCAL Action.—Of the local action of thevetin but little is to be said. It has no apparent effect, as already stated, on either the muscles or nerves, as both structures seemed to respond to galvanic irritation equally as well after as before the local application of the poison. When thevetin is applied directly on the skin, or is placed upon any raw surface, it produces an irritation at first, after a while giving rise to a peculiar burning sensation. Upon the tongue it has similar action, accompanied with a numbness which somewhat disturbs the acute sensibility of that organ.

On the Heart.—I found that when thevetin is applied directly to the exposed heart of the frog, it produces at once irregularity of action, with complete paralysis, in a very few minutes, the heart appearing then bloodless and much contracted.

On the Pulse.—Thevetin produces a diminution in the number of heart-beats. In large doses, its depressing action upon the cardiac rate is very decided. The

slowing of the heart-beats may be due to change of blood-pressure, to the influence which a drug has on the cardio-inhibitory apparatus (by stimulating it), to a depressing action on the cardio-motor ganglia, or by acting on the heart-muscle itself. It is found that thevetin is still able to reduce the pulse-rate after section of the vagi, and even after all nervous connection with the heart is cut off, as the following experiments will show:

*******										
No. 49.—Dog.										
Time.	Dose.	Pulse.	Remarks. Cut both pneumogastrics.							
11.12	½ centig.	•••	Injection into femoral vein.							
.13	, _	72								
.14		7 <sup>2</sup> 68	25 1 111							
.15.30		68	Muscular tremblings.							
		69 67	Convulsions,							
.16.15										
.18		54								
.18.35		52	A 1 . 3 3							
.20		***	Animal dead.							

Experiments 50 and 51 were precisely similar in method and result to that just recorded.

ı	record	cu.							
I		No. 52.—Cat.							
	Time.	Dose.	Pulse. 73	Remarks. Cut all nervous connection with the heart; artificial respiration.					
	12.3 .5 .5.30 .6 .6.15 .7.15 .8 .9.15	½ centig.	70 69 69 68 60 64 52	Into femoral vein,					

Thevetin, therefore, as the above experiments seem to prove, diminishes the number of heart-pulsations by its influence on either the heart itself or upon its contained ganglia; but, as we have seen that the drug acts powerfully on the cardiac muscle when applied locally, we can almost safely put out of the question any effect on the ganglia, and conclude that thevetin reduces the pulse-rate by its action on the heart-muscle.

On Blood-Pressure. — Thevetin causes the column of mercury in the cardiometer to ascend above its normal height. This rise is constant, as will be shown in the experiments that follow. The mercury stays up, but subsequently falls, due, of course, to paralysis of the heart,—that is, when the dose has been large enough to cause death. Twenty experiments were made, although only a few are here separately reported; cats, dogs, and rabbits were employed. The carotid and femoral arteries were used for the manometer; the poison was usually introduced into the ex-

.20.30

ternal jugular, saphenous, or femoral veins; similar results, however, were obtained when the drug was injected subcutaneously. Small and large doses seem to have the same effect, proportionately, on the arterial pressure.

No. 53 -- Rabbit

	210.	23. 2140	UIU.
Time.	Dose.	Pressure.	Remarks.
	-/	185	
2.18	½ centig.	***	Injected into jugular.
.19	n	190	
.19.30		192	
.20.15		194	
.22		195	
.23		196	
.25		200	
.28		200	
.28.30		165	Convulsions.
.29		171	Convulsions continue.
-31		-/-	Dead.
-3-		•••	Dead.
	$N_0$	54.—Rab	hit
Time.	Dose.	Pressure.	Remarks.
		183	
11.14	½ centig.	444	Into femoral vein.
.16		210	
.16.45		205-210	
.17.15		210-215	
.17.30		215-220	
.17.45		225	
.20		165	Clonic convulsions.
.20.15		160-165	Convulsions continue.
.20,13		100 105	Convuisions Continue.

The increase of the arterial pressure may be owing to an acceleration of the heart's action, to an action on the heart itself which would cause that organ to propel more blood, or to contraction of the capillaries, due either to stimulation of the vaso-motor centre in the medulla or to a direct action on the vaso-motor nerves themselves. It is found that thevetin is still able to elevate the blood-pressure after section of the pneumogastrics, and even after the cord is cut,—i.e., after vaso-motor paralysis; so that its action must be either upon the heart itself or upon the vasomotor nerves, irritation of which would produce a diminution in the calibre of the capillary blood-vessels, and thus an increase in the blood-pressure. In all the experiments in which division of the medulla spinalis was made, post-mortem examinations showed complete section of the cord. Of the various experiments, only three are

essure. Remarks.  5-205 Cut both vagi.
5-205 Cut both vagi
Injected into jugular.
Into saphenous vein.
175 Convulsions. 160 Opisthotonos Heart ceases to act Animal dead.

	Λ	Vo. 61.—D	og.
Time.	Dose.	Pressure.	Remarks. Vagi divided.
12.53		200-212	, ag. a a.
•54	I centig.		Into femoral vein.
-55		225	
.56		260-270	Struggles.
.56.15		260	
.56.3o		280	Quiet again.
-57-30		290	•
-57-45		160	
.58.15		170	70.1
1.4		***	Pulse stopped. Death.
1.4		***	Death.
	Λ	Vo. 62.—D	og.
Time.	Dose.	Pressure.	Remarks.
			Vagi cut; cord di-
			vided between atlas
			and occiput; artificial
			respiration.
11.48	T/ compiler	210-212	T
,48.30	½ centig.	***	Into jugular vein.
.50.30 .50.45		250 250–260	
.51		260-270	
+53		260-270	
.53.30		270	
•54		273	
.56		***	Dog is dead.

Many experiments were performed by applying the drug locally or by giving it subcutaneously to the frog, and then watching patiently the web of the batrachian's foot under the microscope, to see if there would be produced any change in the size of the capillary blood-vessels (a micrometer being used); but in no case did the capillaries undergo any change whatsoever, showing, therefore, that neither the muscles of the walls of the vessels nor the vaso-motor nerves are influenced by the That being the case, we must, at present, arrive at the conclusion that thevetin increases the arterial pressure by an action on the heart itself, probably by stimulating its intra-cardiac ganglia.

On the Respiratory System.—The respiratory function in thevetin-poisoning is somewhat irregular. The drug causes sometimes an increase in the respiratory movements at first; at other times we have a primary decrease, followed by an increase in the number of those movements; most frequently, however, we have a primary increase, this being followed by a diminution, and finally by their complete cessation. The following experiments will serve as examples of a large number made:

	. 1	Vo. 65.—Dog	g.
Time.	Dose.	Respirations per minute.	Remarks.
10.58	5 centig.	***	Subcutaneously
.I		3 <sup>2</sup> 3 <sup>2</sup>	
•3		29	
.7		27 26	
.23		23	
.25		20	

	Λ	To. 66Mou	se.
Time.	Dose.	Respirations per minute.	Remarks.
11.44	1/8 centig.	140	Subcutaneously.
.49 .50		160 160	Clonic convulsions.
.51 -54		151 108	Convulsions.
·57 ·59		40	Paralysis.
	No.	68.—Guinea	r-Pig.
Time.	Dose.	Respirations per minute.	Remarks.
4.10	½ centig.	76 	Subcutaneously.
.22		114	Convulsions.
.24		. 90	
,26		90	
.30		76 21	
•33		15	
·34		0	

The same results are obtained after section of the pneumogastrics.

No. 72.—Rabbit.							
Time.	Dose.	Respirations per minute.	Remarks.				
			Vagi cut.				
10.14		24					
.16	½ centig.	***	Into femoral vein.				
81,		64					
.19		72	Paralysis.				
.21		4	Convulsions.				
.24		ò	Animal dead.				

But, as will be seen in the following experiment (one out of three performed), the acceleration in the respiratory movements does not occur after section of the cord, which shows that the primary increase in the number of respirations is due evidently to excitation of the respiratory centres in the medulla oblongata. The subsequent decrease and final cessation of the respiratory movements are due, probably, to an action on the functional nerves and muscles of respiration, because it is possible that the drug has this action on these particular structures.

#### No. 75.—Rabbit.

Time.	Dose.	Respirations per minute.	Remarks.  The cord was cut in the cervical region; injection into external jugular vein.
		128	
10.42	½ centig.	***	
.43		84	
.46		82	
.48		64	
-55		50	Paralysis.
.57		48	Convulsions.
.58		36	
11.2		0	

Action on the Nervous System.—From previous experiments, we have seen that thevetin produces convulsions frequently in mammals; less so in birds, with the exception, perhaps, of the pigeon; rarely

in batrachians; the convulsions being clonic or tetanic,—the former being much the more frequent. That the convulsions produced by thevetin are not due to any action of the drug upon the muscles themselves, or upon the peripheral ends of the sensory or motor nerves, was proven by the following and other similar experiments:

Experiment 77.—Cat. The right femoral artery was tied, and half a centigramme was injected into the external jugular at 12.5 P.M. 12.9, violent clonic convulsions all over the body; 12.11, the animal is dead.

Experiment 78.—Dog. Tied the abdominal aorta, and, after being assured that there was no circulation in the lower extremities, one centigramme of thevetin was injected subcutaneously at 9.35 A.M. 10.45, decided clonic convulsions uniformly all over the body, which continued for five minutes, being followed by death.

The convulsions must be due either to the action of thevetin upon the spinal cord or upon the brain. I found in four experiments that the convulsions do not occur after section of the cord below the point of division. The evident conclusion is, therefore, that the convulsions produced by thevetin are cerebral.

Paralysis.—That the paralysis produced by thevetin is not muscular, or due to an action on the motor nerves, is evident from the fact (already mentioned) that the muscles and nerves, after death, respond readily to galvanic irritation,—a fact, indeed, which has been so frequently observed by the writer that evidently the glucoside has little or no effect on the structures in question. The paralysis must therefore be spinal or cerebral. A series of experiments was made to determine this question, and the results obtained point to its being spinal.

Experiment 83.—Kitten. Tied all the vessels of the left leg, and at 10.23 injected one centigramme hypodermically. 11.32, paralysis ensues; 11.43, death. The right sciatic is irritated, and is found to respond equally as well as the left sciatic. Galvanic currents applied to the muscles of the right leg produce as free muscular contractions as those of the left limb.

Experiments 84 and 85 gave identical results.

The fact, again, that reflex action, after section of the cord, is lost as quickly as in the normal animal, shows that the paralysis must be spinal.

Experiment 86.—Took two frogs, of equal size, A and B. A had the cord cut high up, and was allowed to recover from the shock. After that, each received one centigramme of thevetin subcutaneously at II.IO AM. II.59, reflex action is abolished in both animals, as tested by chemical stimuli and galvanic irritation. Similar experiments gave similar results. The paralysis produced by thevetin is therefore spinal.

Action on the Alimentary Canal.—Peristalsis.—This is influenced by thevetin, being increased to an appreciable degree. Our attention was often called to this, when, after death, the intestines retained the power to move for a considerable time. Several experiments were performed on cats, dogs, and rabbits, by either giving the poison subcutaneously or intravenously, and then looking at the abdomen, or by opening the walls of the latter, watching the movements of the intestines themselves, to see if this action of the drug was constant. It was always found that intestinal peristalsis was considerably increased.

Vomiting.—To determine whether the vomiting produced by the vetin was the result of an irritant local action on the stomach,—i.e., on the mucous membrane,—or whether it was due to reflex excitation of the centres in the medulla oblongata, a series of experiments was instituted, by tying the aorta of various animals, and thus endeavoring to prevent the drug from entering the stomach. For example:

Experiment 87.—Dog. Tied the abdominal aorta at 4.50 P.M., and then injected, subcutaneously, three-quarters of a centigramme of thevetin. Salivation appeared at 5, but no other marked symptoms were observed for a considerable time. 6.6 P.M., vomiting occurred.

Experiment 88.—Dog. The aorta was tied just as it passes through the diaphragm, and at 10.53 A.M. injected, hypodermically, one centigramme. 11. salivation begins to take place rapidly; 11.8, vomiting occurs.

Experiment 89.—Kitten. Tied the artery, and administered one centigramme at 2.48 P.M. 3.5, the animal died in great dyspnæa. There was no vomiting, owing, perhaps, to the rapid action of the drug on the heart and the respiration, producing death before the other effect could take place.

Experiment 90.—Dog. The ligature was placed around the aorta just as the artery leaves the diaphragm. At 11.34, injected under the skin one and a half centigrammes of thevetin. 12.40, very profuse salivation occurred, followed by vomiting.

After all, these experiments were not

very successful, because, in all the animals operated upon, on post-mortem examination it was found that some little vessel was still in communication with the stomach, by which, probably, some of the poison might have had access into the viscus, and thus have interfered with the complete success of the experiment. If the experiments prove nothing else, they show, at least, that the operation which must produce a great shock does not control the emetic action of the drug.

On the Temperature.—Like many other drugs, thevetin lowers the temperature. To show the range of its influence, the following experiment is detailed:

Action on the Pupil.—A series of experiments was made expressly for the purpose of determining the action of the drug on the pupil, with the following results:

The pupil undergoes no change, as already stated, when thevetin is administered subcutaneously or into a vein. If the drug, however, is applied locally, it produces an intense conjunctivitis, and it is then that the pupil contracts,—due, of course, to a reflex irritation.

Action on the Glandular System.—One of the most marked effects of thevetin is to stimulate the salivary glands, and thus largely increase their secretion. This usually happens, as already seen, when the drug is injected hypodermically or directly into the circulation; so that the increase cannot be due to a local action of the drug. It is probably the result of an action on the chorda tympani nerve. thevetin had any action on the cutaneous glands, it was not noticed, as such is not easy to observe in the animals experimented upon. The biliary secretion does not seem to be affected by the poison, as there were no marked lesions observed on post-mortem Nothing can be said, at examination. present, as regards any of the other secretions.

#### CONCLUSIONS.

A résumé of all the conclusions arrived at will now be given:

I. Thevetin is a very powerful poison,

the minimum fatal dose in the common frog (Rana esculenta) being 1 of a centigramme.

II. Theyetin produces death by asphyxia and by cardiac paralysis, more frequently

by the former.

III. Theyetin is an irritant when locally applied to the skin, giving rise to a pecu-

liar burning sensation.

IV. The diminution in the number of heart-pulsations produced by thevetin is due to its action on the cardiac muscle. The poison seems to have no action on the pneumogastrics.

V. The arterial pressure is increased by an action of the drug on the heart itself, i.e., by a stimulating action on the intra-

cardiac ganglia.

VI. The primary acceleration in the number of respirations produced by theveting is due to excitation of the centre in the medulla oblongata, the subsequent decrease and the final cessation of the respiratory movements being due to an action on the functional nerves, and also probably to an action on the muscles of respiration particularly.

VII. The convulsions produced by the-

vetin are cerebral.

VIII. The paralysis produced by the

poison is spinal.

IX. As sensation is lost before voluntary movements, and as the nerves remain intact after death, it is evident that the abolition of reflex activity is of spinal origin, and is dependent upon an action of the drug on the sensory tract of the

X. Thevetin increases intestinal peri-

stalsis.

XI. Like most other drugs, thevetin

lowers the temperature.

XII. When locally applied, thevetin produces contraction of the pupil, due to peripheral irritation.

XIII. In the vetin-poisoning the salivary is the only secretion markedly increased.

In concluding this paper, I desire to tender my grateful acknowledgments to my compatriot and friend Dr. Plutarco Ornelas, for furnishing me with the drug and for many words of encouragement, and also to my distinguished friend Dr. B. F. Lautenbach, under whose supervision the experiments were made, for much valuable assistance.

PHYSIOLOGICAL LABORATORY OF THE UNIVERSITY OF

## DISLOCATION OF THE WRIST WITHOUT FRACTURE.

BY OLIVER ROLAND, M.D.,

Lancaster, Pa.

'HIS accident occurred in the Children's Home in this city.

Morton McKenney, a boy about 12 years of age, fell from a ladder on which he was playing (a distance of five or six feet), striking on the back of his right hand, which was flexed at the time. He felt a sharp, severe pain when he struck the ground, and, on getting up, found he could neither move nor extend his hand in the least. He was taken to the infirmary of the Home, and I was at once sent for. Upon making an examination, his right hand was found flexed at a right angle with the forearm, and the fingers flexed upon the palm. The hand was held so firmly in this position that it could not be straightened even when considerable force was used. There was no swelling, and no pain unless efforts at extension were made, and crepitus could not be obtained after a careful exami-The flexor tendons were rigid and cord-like; the radius and ulna projected in front, and the articulating surfaces could easily be felt, while the carpal bones formed an irregular tumor in front;-from which symptoms, as well as the subsequent course of the case under treatment, a forward luxation of the wrist was diagnosed.

I had the boy etherized, but, before he was completely relaxed, in some struggling efforts he made the bones suddenly slipped into position, with the usual sensation and sound accompanying the reduction of dislocations. There was now no tendency to a reluxation, though the hand was moved in all directions, As such movements, however, caused some slight pain, a palmar splint was applied and continued in place for four days, more as a precautionary measure than for any other reason. A day or so after its removal, I found the boy playing on the same ladder from which he had fallen: this certainly he could not have done had there existed a fracture. It is now more than a month since the accident, and during all this time there has not been any trouble in the joint.

Remarks. — Though this accident was regarded by the older writers as a not unusual occurrence, we believe that, at the present time, all surgical authors speak of it as rare, exceedingly rare, etc.

Hamilton ("Fractures and Dislocations") gives Francis L. Parker, Professor of Anatomy in the Medical College of South Carolina, as authority for stating that there are but seven cases on record that are free from all objection,—i.e., that may be classed as simple uncomplicated dislocations; while Dupuytren, who almost absolutely denied its existence, considered the ligamentous and fibrous construction of the joint to be of such strength that a fracture would almost invariably occur before a laceration sufficient to permit a luxation.

It has been, therefore, chiefly on account of its rarity that the above case was judged to be of sufficient interest to report.

## TRANSLATIONS.

THYMIC ACID AND THYMATE OF SODIUM: THEIR INTERNAL AND EXTERNAL USE.—Dr. Alvin states that for a year past he has substituted thymic acid for carbolic acid in preparations intended to exercise a caustic, alterative, or simply astringent action on the pharyngeal and laryngeal mucous membranes. These preparations, much better tolerated, of a more agreeable taste, and quite as active as those of carbolic acid, have given him the most satisfactory results. The following formulæ are among those used by Dr. Alvin:

SOLUTIONS FOR APPLYING TO THE MOUTH AND THROAT.

#### I. Caustic.

- a.—R Acid. thymic. cryst., pt. 1; Glycerinæ puræ, pts. 2-4.
- b.—R Acid. thymic. cryst., pt. 1; Iodini, pt. 1; Potassii iodidi, pt. 1; Glycerinæ puræ, pts. 5-15.

#### 2. Alterative.

- a.—R Acid. thymic. cryst., pt. 1; Glycerinæ puræ, pts. 50.
- Acid. thymic. cryst., pt. 1;
   Iodini, pt. 1;
   Potassii iodidi, pts. 1-2;
   Glycerinæ puræ, pts. 120;
- c.—R Acid. thymic. cryst., pt. 1; Tannin, pt. 1; Glycerinæ puræ, pts. 100.

### 3. Astringent.

R Acid. thymic. cryst., pt. 1; Glycerinæ puræ, pts. 500.

#### Pastilles.

R Thymate of sodium, 1 milligr. (gr.  $\frac{1}{65}$ ).

These pastilles are useful in superficial stomatitis, irritation of the upper air-pas-

sages, and erosion of the mucous membrane in smokers, and they are very useful in quieting spasmodic cough. They should be made trial of in whooping-cough.

R Thymate of sodium, 1 milligr. (gr.  $\frac{1}{65}$ ); Chlorate of potassium, 10 centigrs. (gr.  $1\frac{1}{2}$ ).

In severer forms of stomatitis, amygdalitis, pharyngo-laryngitis.

R. Thymate of sodium, 1 milligr. (gr.  $\frac{1}{65}$ ); Borax, 10 centigrs. (gr.  $1\frac{1}{2}$ ).

Ulcerative stomatitis and amygdalitis.

These proportions are, in each case, for a pastille of sixteen grains; they may be taken to the number of six to ten daily, and have the advantage of overcoming, to a greater or less degree, the putridity of the parts diseased.

In pulmonary affections the following

formula has proved useful:

R Sodii thymat., 1-4 centigrs. (gr. ½-½); Syrupi simplicis, 60 grammes (3xv); Aquæ, 100 grammes (3iv).

Sig.—Take in the course of twenty-four hours.

As thymic acid is often found impure and more or less inert, the crystallized form should always be used. It is a strong caustic.—Bull. Gén. de Thérap.,

April 15, 1879, p. 320.

Pelletiérine as an Anthelmintic.— Dr. Bérenger-Féraud refers to his previous writings on the anthelmintic action of pomegranate bark in the Bull. Gén. de Thérap. of November 15, 1878. He now gives the results obtained from the use of pelletiérine, the alkaloid derived from this The alkaloid manufactured by M. Ch. Tanret reached him in the form of a syrup of the sulphate. It was given in doses of fifty centigrammes (eight grains), mixed with a quantity of water, and was swallowed in divided portions in the course of ten minutes, the patient lying quietly in bed. Two hours later, thirty grammes (one ounce) ol. ricini were given in emulsion, followed, when no stool was produced, by an enema. Twelve cases were experi-mented upon. In one case sulphate of sodium was used instead of ol. ricini. raud's conclusions are as follows. First, as to the physiological action of the drug, Tanret (Bull. Gén. de Thérap., 1878, t. xciv. p. 455) found that pelletiérine, in the dose of fourteen centigrammes (two grains),

caused merely a slight abatement in the pulse and some dizziness for ten minutes. At the dose of forty centigrammes (six grains), rising to sixty-five centigrammes (ten grains), the symptoms were toxic. For this reason the alkaloid should not be given to women or feeble persons in larger doses than forty centigrammes without The symptoms, as noted by caution. Féraud, are vertigo; a mist before the eves; heaviness of the evelids; occasionally diplopia; cramps in the calves and forearms; tingling in the fingers and toes; occasionally nausea and vomiting. letiérine is less disagreeable to the stomach than pomegranate bark. Occasionally. however, it gives rise to vomiting. no purgative action; on the contrary, it tends to constipation. For this reason the head of the tænia is often retained for a long period, and, when passed, has been dead for so long a time that it is partly digested. - Bull. Gén. de Thérap., 1879, p. 297.

ALCOHOL AS A DRESSING FOR WOUNDS. -Prof. Maurice Perrin, in an article on the comparative value of alcohol and Lister's dressing, concludes with the following general view of the mode of action and manner of employing the alcohol Without being a panacea, aldressing. cohol presents a perfect antiseptic treatment, and one in the highest degree available for the purposes of conservative sur-Under its influence the deepest contused wounds, compound fractures. where there are clots and detritus of all sorts, -as in gunshot injuries, -lose their exceptionally grave character; they have no more smell than of ordinary recent maceration; local reaction is diminished. sometimes it is absent. That tumefaction of the soft parts in the neighborhood of the wound, that production of gas, which is the ordinary prelude of the gravest accidents, does not show itself. Slightly painful on its first application, alcohol soon gives a sensation of agreeable refreshment; suppuration is infrequent and slight; erysipelas is of very rare occurrence; traumatic fever is very slight, the thermometer not often rising above 38° (100.5° F.).

It must be admitted that the pale, flabby, macerated appearance of a wound treated with alcohol is not attractive; this, however, is of little moment. The alcohol used is of 80° strength; at first applied

pure, later mixed with an equal bulk of water. In operations, no extraordinary precaution beyond extreme personal cleanliness is required. Before the patient recovers from the anæsthetic, the bleeding surface is impregnated with pure alcohol by the aid of a tampon of cotton. sort of maceration is continued until all bleeding has ceased, the wound putting on a uniform brown tint. In deep wounds, where immediate union is hoped for, a drainage-tube is introduced, and then the edges of the wound are brought together. The whole is then covered with several layers of cotton soaked in alcohol and enveloped in oil-silk, kept in place, when convenient, by rubber rings. Occasionally, Professor Perrin subjects wounds to continuous irrigation with alcohol by the aid of the usual apparatus.—Bull. Gén. de

Thérap., 1879, No. 7.

ERYSIPELAS MIGRANS IN A PREGNANT WOMAN — ICTERUS — ABORTION — DEATH. -M. Arnozan reports the case of a woman subject to attacks of erysipelas, occurring at the menstrual period, who applied for relief from an attack coming on in the third month of pregnancy. The face was alone attacked, and by the end of four days the affection had entirely disappeared. It returned, however, a few days later, spread over the top of the head and down the neck behind, where large phlyctenæ appeared upon red patches of erysipelatous skin. From this time the affection followed an irregular course. Sudden remissions were followed by rapid defervescence, chills, etc., the thermometric curve showing extraordinary variations. Whenever a fresh attack came on, large, irregular, festooned patches of erysipelatous skin appeared on the back, which again disappeared as suddenly as they had come. Metrorrhagia (abortion?—ED.) followed, and at the same time the skin became jaundiced, the discoloration growing more marked day by day, and being accompanied by progressive emaciation. patient's condition grew rapidly worse: large livid patches appeared on the back; a bed-sore showed itself upon the sacrum. The patient sank rapidly, and died at the end of two weeks from the occurrence of the first symptoms. M. Hallopeau, who was consulted, regarded the case as one of puerperal septicæmia. The treatment was simply tonic and supporting.—La France Méd., 1879, p. 234.

CONVALESCENCE. - Every disease, according to Dr. Barres, leaves behind it a condition of denutrition and hydræmia. The convalescent is not only pale and thin, but his nervo-muscular functions are shaken and his nervous impressibility exaggerated. Light, fatigue, noise, — all annoy and trouble him. Though the appetite may be good, the digestion is poor. The secretion of gastric juice is insufficient in proportion to the copious supply of food demanded. Under these conditions, it is the double object of the physician to favor prompt reparative action in the organism and, at the same time, to moderate the exercise and activity of its functions. Wine has been recommended, from the earliest times, to accomplish this object. Acting both as a plastic, a respiratory, and a conservative aliment, and on account of its density being nearer water than is brandy, it is not only more slowly absorbed, but produces the happiest effects upon the system. The best wines for the convalescent, according to Dr. Barres, are the astringent and tannated wines, which contain also sugar and alcohol in fair quantity. Of these, that of St. Raphaël is pre-eminent, containing fifteen to sixteen per cent. of alcohol, while Bordeaux contains but eight to nine, and Burgundy eleven to twelve.—La France Méd., 1879, p. 231; from L' Union Méd.

MILIUM IN THE SKIN OF THE FACE OF New-Born Infants. — Kustner (Cbl. f. Med., 1877, p. 927; Med. Times, January 19, 1878) called attention to those small, white nodules (milium) found on the face of infants born before full term, which he considered significant of immaturity. A. Epstein now comes out in an article denying the validity of this sign. Not only has he found the profuse eruption of milium more frequently in children born at full term than in premature infants, but, in a case of twins, one presented these nodules profusely scattered over the face, while the other showed only a very few. Epstein also objects to the term "comedo" used by Kustner, as this is really a plug in the gland, whereas true milium, as found in infants, is a white, pearly nodule, the gland being completely covered with epidermis. Epstein explains the occurrence of milium by the profuse secretion of sebaceous matter which takes place during intra-uterine life, and which, as is known, accumulates on the surface of the skin, clogging up the glands, whose outlets, when plugged up by epidermis, form the milium.—Cbl. f. Chir., 1879, p. 155; from Centr. Zeitung f. Kinderheilk.

Angina Scorbutica. - G. Pinder gives a case of scurvy where, as the characteristic swelling of the gums appeared, the mucous membrane of the posterior wall of the pharvnx showed characteristic changes. of two kinds. There were millet-seedsized elongated excrescences scattered here and there over the surface, darker in color than the surrounding mucous membrane, and in considerable number. There were also hemorrhagic patches in the mucous membrane, often covered with yellowish crusts. In other cases the little excrescences were spread over the back of the throat; in these cases the mucous membrane seemed always lighter, drier, and shining. When these growths came away, scorbutic ulcers were left, with the borders infiltrated with blood and a bleeding, uneven bottom. The inward treatment was on the usual anti-scorbutic plan. ulcers were thoroughly cauterized with nitrate of silver.—Cbl. f. Med., 1879, p. 143; from Wien. Med. Wochens.

SINGLE KIDNEY.—At the autopsy of a patient who died in December, 1878, in the service of Dr. Crocq, in the Brussels Hospital, from the effects of typhoid fever, a rare anatomical anomaly was observed. This patient had but one kidney,—the left. This single kidney, however, was very large, weighing four hundred and twenty grammes, and occupying the ordinary position in the abdominal cavity. The right kidney was represented by a mass of connective tissue the size of an almond. right renal vein and artery were only rudimentary, and were fused to this mass of connective tissue. The left renal artery and vein, on the contrary, were greatly developed, and the left ureter was much enlarged, while the right was quite small. There had been no urinary difficulty during life, the left kidney having satisfactorily performed double duty.—Le Mouve-

ment Méd., 1879, p. 161.

RECENT inquiry has shown that no fewer than eleven hundred and fifty-nine lives have been lost by accidents in the London streets during the past ten years, whilst the number of injuries during the same period is returned as twenty-three thousand three hundred and seventy-nine.

# PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, JUNE 7, 1879.

## EDITORIAL.

BE VIGILANT.

WE do not propose to-day to reiterate the farcical history of the medical college convention which we published in our last issue. It does seem, however, fitting to reiterate the lesson which is yearly taught by the successive chapters of the history of the associated medical colleges and similar organizations,—a lesson which, notwithstanding every effort is made to obscure it, remains so plain that he who runs can read.

The hopelessness of reform through combined effort of the colleges is but too apparent; scarcely less apparent, also, is the attempt which is being made by many to hide or avert personal responsibility by crying loudly for conjoint reform. The medical faculties or the medical schools that desire reform strongly enough to be willing to suffer somewhat for it are the only ones who really desire it at all, and such medical-teaching bodies will go forward, as the University of Pennsylvania is and has been doing, entirely irrespective of what other schools do, and only cautious not to injure the cause they have at heart by attempting such sudden action as to cause absolute ruin.

Until this point of being willing to risk something is reached by any faculty or board of trustees, such faculty or board ought to be held responsible by the profession for maintaining a second-class medical college. Only by eternally holding up to public gaze; only by blowing away continually the dust that is being raised by conventions, reforms that mean nothing, and the other devices that are becoming so fashionable, and showing

continually the naked barrenness of the thing itself, can that public opinion be generated that will at last make any man of high professional aspirations ashamed to be connected with these doctor-factories. Just so soon as professional opinion reaches such an intensity (which it will eventually reach) that it is a serious disgrace for a man to be connected with such colleges as are represented so largely in the Association of American Medical Colleges, just so soon will wide-spread reformation come.

### CORRESPONDENCE.

#### LONDON LETTER.

MIDST the varied relations of the profession there is none more curious than that of consultants and chemists, and especially chemists' assistants. What earthly collusion there can possibly be betwixt a London consultant and a chemist's assistant is not by any means, at first sight, very apparent; indeed, after some little study the matter remains as obscure as ever. Of course it is in human nature for assistants in chemists' shops to recommend any consultant who is known to them by repute, or who is in the habit of sending his patients to the shop in which they Of course it is easily comprehensible that a chemist's assistant is more familiar with a man's name for the latter than the former Enterprising chemists' assistants doubtless read the Lancet, the British Medical Fournal, etc., but it may be questioned how far they are fitted to form a judgment on the merits of the different papers and communications contributed thereto. Possibly enough they recognize whose names are most commonly seen there, and with what subjects these names are associated; so that they have some acquaintance with certain names in connection with certain specialties. So far unobjectionable! It is very natural, too, that they should be familiar with the names of consultants whose prescriptions are constantly in their hands; and if any one casually drops in to ask, "Who is the man to consult for so-and-so?" it is but human nature that they should name some one whose prescriptions often come their way. But the matter does not stop there.

It may be interesting, but I hope sincerely not instructive, to your readers to know how the chemists' assistants' advocacy is systematically cultivated by certain astute men in the profession. The inhabitants of the United States of America are generally credited with

considerable shrewdness and capacity to see their way, but it is to be hoped that they have not got on to the tracks which I am about to describe. Many persons who do not know anything about consultants, and yet who wish to consult some one for some ailment or disease with which they are afflicted, think the readiest and surest plan is to drop into some well-known chemist's shop and ask who is the best man to see for such-and-such a com-The quiet, innocent-looking youth who is so interrogated immediately raps out some consultant's name. Unsuspecting and confiding, the inquirer goes away with the impression that he has just done a very wise thing, and congratulates himself on the cleverness of his manœuvre. In full trustingness he goes to this consultant. That he has been hoodwinked and sold thoroughly is an idea which does not flit across his mental horizon, and in the bulk of cases the game is never detected, and the satisfied inquirer recommends others to go and do likewise when they wish to know about consultants. There are two ways in which this thing is worked,the negative plan and the positive plan. To take the negative plan first: many consultants (of whom I am one) do not recommend any chemist in particular, feeling it more straightforward to say to the patient, if asked to whom the prescription should be taken. "Take it to any good chemist; I do not recommend any one in particular." The patient can then go to any chemist he pleases, and feels there can be no secret understanding betwixt prescriber and dispenser. It might, perhaps, be better policy in self-defence, in the future, to indicate one or two, but the plan has not yet been adopted by me; consequently the young men in certain fashionable shops are probably but little familiar with my name, and, as said before, their acquaintance with consultants' names is rather through the prescriptions they dispense than their familiarity with medical literature. Some little time ago the dispenser of the Leeds Public Dispensary, being in town, was led to consult me about himself. He had known me since I occupied the post of Senior Resident Medical Officer to that institution. We had seen each other several times since I planted the tent-pole in London, but he found, when arriving in town, that he had not got my address with him; this he thought a matter of little moment, as he could call at any chemist's and procure it. Accordingly, he called in at a very well-known chemist's shop in Bond Street and asked for my address. Somewhat to his surprise, he my address. Somewhat to his surprise, he was assured, in the most confident manner imaginable, that "there was no such medical man in London as Dr. Milner Fothergill; he must be quite mistaken!" What was his complaint was then asked him by this youthful young sprig of rascality; but he saw the little plant, and marched off, as he said, to the first tavern, where there was a Post-Office Di-

rectory, where, of course, he found the information he sought without the slightest diffi-I venture to think (without being chargeable with much egotism and self-conceit) that that promising youth probably was conscious, or ought to have been, that he was telling a deliberate untruth.

Amusing stories are told of persons from curiosity calling at a series of chemists' shops and inquiring systematically at one after another as to who was the man to consult, say, first, for syphilis. "Mr. Zanoni Inno-' was the answer at once given. At the "Who is the man to consult for a stricture?" "Mr. Zanoni Innocent" again is the response. At a third, "Who is the man to see about hemorrhoids?" "Mr. Zanoni Innocent." Going a little farther, the inquirer calls at another shop, and asks, "Who is the man to see for heart-disease?" altering his tack; still the same answer, "Mr. Zanoni Innocent." It seems pretty clear to him by this time that there must be some especial reason for this wide-spread confidence in Mr. Zanoni Innocent on the part of chemists' assistants; but of course how it has been brought about is a mystery which cannot very easily be cleared

So far there has been nothing very flagrant described; but the game does not stop at this point. Chemists' assistants, especially those who are in fashionable shops, are probably like the rest of humanity, a mixed lot. They wish to push themselves forward in the world, and keep a pretty sharp eye on the main chance, otherwise, their personal interests. Some, doubtless, are less scrupulous than others; and I venture to think few readers will hesitate about forming their opinion on this matter, that the thing is carried just a little too far when it has reached the following point. A patient, having consulted a physician about his chest, takes the prescription to a well-known chemist's to be dispensed. English people attach, usually, great importance to the prescription, which they think the chief consequence or outcome of a medical consultation; therefore many go with their newly-acquired fetish to some famous, well-known chemist's shop. They know they will have to pay a long price; but then they regard that as a substantial guarantee of the quality of the medicines, and of the care with which the prescription will be dispensed. The youth to whom the prescription is handed looks at it sardonically, and remarks contemptuously, "For piles?" Of course the patient is very much taken aback at this, and exclaims, "Bless me! no! For bronchitis!" The youth has achieved his end, and the surprised and startled patient's confidence in the man he has just consulted is irrecoverably shaken. That he should have got a prescription for piles when he went about his bronchitis, comes to him as a very unpleasant revelation. It is not only that he has spent

his money in vain, but that he has been cheated into risking his health, and possibly ruining his constitution, by having the wrong medicine prescribed; the thought is very shocking that he should thus have been trifled with by ignorance or carelessness. midst of his perturbation he gasps out, "Who is the best man to consult about bronchitis?"
The placid answer is, "Oh, Dr. Vitreous
Tendon, of course!" The deed is done; an assassin-like stab has been given to the reputation of an nnoffending man, and the young scoundrel chuckles at the skilful manner in which the blow has been delivered. The patient goes away wrathful and indignant that the doctor he had just consulted should have treated him so badly, and vows with genuine earnestness that he himself will never consult him again; "No; nor, by Jove, shall anybody I know consult him either, if I can help it!" Away he goes, circulating the story among his acquaintances, getting this unlucky physician a bad name so far as he can. Now, this is certainly diabolical wickedness; and the apparent artlessness with which it is done disarms all suspicion. That the chemist's assistant had any motive other than of saving him from taking a medicine unsuitable if not possibly dangerous, any ulterior design in his apparently friendly action, never crosses the victim's imagination. It is the apparent innocence of the scoundrelism which is at once its strength and its protection. The utter guilelessness of the ingenious surprise of the young man behind the counter "fetches" the victim, who never detects the trap that is so skilfully laid for him. That that young villain, that moral assassin, is "squared," there can be no doubt; and possibly enough he does not realize the injury he is doing to the unoffending physician to whose reputation he has delivered a nasty stab; but he does it all the same, and as effectually as if his conduct had been inspired by the most deliberate malice. He wished to put a fee into the pocket of Dr. Vitreous Tendon, that was his main object; we will hope, for the sake of humanity, that he does not realize the injury he is doing to another man. A less indecent but equally effective plan is for the chemist's assistant to have three names on a card, and when asked about whom to consult, he declares his inability to decide, until the question is put home to him, "Whom would he consult, if necessary?" He then mentions the lowest name on the list. The apparent absolute bona fides of this crafty villain allays any possible suspicion of "a plant" which might arise in the mind of the sold individual, and

the inquirer goes away perfectly satisfied. It is quite time that this little arrangement should be "blown upon;" for it is impossible to avoid slang terms when alluding to such an improper proceeding, whose demoralizing tendency is so obvious. By what underground communication the chemist's assistant

is rewarded for his share in the unholy compact has not yet transpired; but it is quite obvious some arrangement does exist.

Of course no one objects to a man giving a friend a "boost" when it can be fairly done; but to do it in the cut-throat manner just described is grossly unjust to those who must necessarily and unavoidably be injured by this cold-blooded wickedness. There can be no objection taken to a man's pushing on in the world if he only fairly respects the interests of others; but the enterprise of men like Mr. Zanoni Innocent and Dr. Vitreous Tendon scarcely allows for one's duty towards one's neighbor; it is selfishness run riot; it involves the shattered, or at least assailed, reputations of others, over which these men essay to clamber into repute. It will be easy for those who can scarcely credit the fact that such iniquitous arrangements can exist to disbelieve what is here written; and doubtless the chemists' journals will resent what is here said when this comes under their notice; but that will not alter the facts. Doubtless these journals will blush to think that such deeds can be done by chemists' assistants in shops of repute otherwise, and will cast doubts upon the statements here made. How much more discredit, then, will lie at the door of members of a reputable profession who have stooped to "put up" such a game! It is at once degrading and demoralizing to those engaged in it, and reflects discredit on two respectable sections of the community. But how consultants on the one hand and chemists' assistants on the other are to prevent such arrangements among "black sheep" it is impossible to see, unless it be by combined expressions of disapprobation of such proceedings and arrange-

In striking contrast with men who could stoop to the degrading schemes just detailed is the career of the late lamented Dr. Charles Murchison. He was at a medical conversazione less than forty-eight hours before his death, looking as well as he has done for some years past. Grave, serious, and thoughtful was his expression, for he was the subject of serious aortic incompetence, which he knew well might prove fatal at any time. Dr. Murchison was related to the late Sir Roderick Murchison, of geological repute. He commenced his student career in 1846, which was one of unusual brilliance. He entered the East India Company's service, and there saw a great deal of fever and the disease of the liver, which attracted much of his attention in afterlife. After this he came to London and com-menced practice. To show how multifarious was his knowledge, in India he was a professor in chemistry; in London he became a demonstrator of anatomy, a lecturer on botany; he was assistant-physician to a general hospital as well as to the Fever Hospital. He became lecturer on pathology, and for four years was honorable secretary of the Pathological So-

ciety, where he performed his duties so efficiently that he was made president of the society in 1877, unusually early. His famous work on "The Continued Fevers of Great Britain" appeared in 1862, after two years' experience at the Fever Hospital. He translated Frerich's "Clinical Study of Liver Disease" for the New Sydenham Society, and subsequently, in 1873, he delivered the Croonian Lectures before the Royal College of Physicians, on the Functional Derangements of the Liver, which are replete with the most interesting and instructive matter. These were comprised in a work written later on, entitled "Lectures on the Diseases of the Liver. During this time he was Examiner in Medicine to the University of London, while he was actively interested in the spread of disease, tracing out the Marylebone outbreak of typhoid fever, spread by milk, in 1872; in-deed, doing a thousand and one things besides conducting a rapidly increasing practice. All this, too, was done by a man with serious aortic disease. He was Lecturer on Clinical Medicine and Physician to St. Thomas's Hospital, where his thorough and vigorous teachfing of clinical medicine will not readily be forgotten. He followed very much in the steps of his teacher, the late Professor John Hughes Bennett, of Edinburgh, in his form of teaching. The student was driven at the case, and no turning or twisting could release him from the searching cross-examination to which he was subjected. His knowledge (or ignorance, as the case might be) was thoroughly tested in an apparently merciless manner. But the student never forgot teaching of this sort.

Some years ago, when first coming to London, I attended Dr. Murchison's class several times as a student, and shall never forget the example he made of a student who diagnosed vesical calculus, but who could not give his reasons for his diagnosis. He, however, knew something about the subject before the doctor was done with him. On asking the victim, after the round was over, how he liked the performance, he admitted it was scarcely pleasant, but affirmed it was very instructive. He said that, unfortunately, he had been told what the case was without being informed how the diagnosis was made, and Dr. Murchison's suspicions being aroused, he was doubly strict in his cross-examination. with all this apparent indifference to the feelings of others, which was genuine enough with the late Professor Bennett, there was a great deal of kindliness; and Dr. Murchison kept in his waistcoat-pocket a card on which were written the names of those who were willing to be so cross-examined. He did not pitch upon a man promiscuously and then rake him with questions; he first asked if he might put his name down on his list, and then looked over his list before he selected his victim.

No more honorable name is there on the

roll of illustrious British physicians than that of Dr. Charles Murchison. He knew what was to befall him, and worked away cheerfully and persistently till the summons came. It came at last, and found him in the midst of work. He had just seen the last of his patients out of his consulting-room, and apparently had stooped to pull a drawer from his writing-table, when he fell dead. He knew about his disease since 1871, yet what a life of energetic industry he led! The amount of work he accomplished would seem a very herculean task for a man in the fulness of his health and strength. His house is closed, but, sad as the story is, it is far less distressing than the closure and sale of the house of another well-known member of the profession in the same neighborhood. Here the savings of a lifetime were swept away in one of the numerous bank-failures which we have had of late, and complete prostration of mind and body followed.

J. MILNER FOTHERGILL.

## PROCEEDINGS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF PHILADEL-PHIA.

THURSDAY EVENING, FEBRUARY 27, 1879.
THE PRESIDENT, DR. H. LENOX HODGE, in the chair.

Calculus of right and double ureter of left kidney. Presented by Dr. M. Longstreth.

DR. MORRIS LONGSTRETH read the history of this case, taken from the clinical records of the Pennsylvania Hospital, as follows:

A woman, æt. 49, widow, admitted January 7, 1879, injured her back by falling down-stairs on the morning of admission. She had suffered four years with symptoms of calculous disease of the kidney and severe cystitis, and had passed several times small calculous masses from the bladder. Two years previously, after much suffering referred to the lumbar region, a sinus opened on the right side, near the crest of the ileum, posteriorly. The discharge from the abscess was abundant at the time of admission.

On admission, the pain and tenderness due to the injury were referred to the vertebræ of the upper dorsal region, but no displacement of the spinous processes was detected, and no crepitus could be produced or felt. There was complete inability to move the lower extremities, or to raise the trunk, or to remain in the sitting posture after being raised up. There was nearly complete loss of sensation over the lower half of trunk, and lower extremities. There was retention of urine, requiring the catheter to be used to empty the bladder. The abdomen was distended.

On the third day, she could pass urine voluntarily; had some slight control of the legs; complained of severe pain between the shoulders. After this time the lumbar abscess discharged more freely, and became a probable source of great exhaustion. On the tenth day, a bed-sore commenced forming over the sacrum, and rapidly extended in breadth and depth. Several cicatrices of old leg-ulcers broke down and discharged freely. After a fortnight, the patient's strength rapidly declined, and she died on January 27, 1879, the twentieth day after the injury. The patient was a large, strongly-built woman, and very fat.

Record of the autopsy, made by Dr. Long-streth, pathologist to the hospital.—The conditions of the heart and the lungs showed that the patient died mainly from the failure of respiration, and partly from exhaustion also; otherwise these organs presented no-thing especial to note. The left kidney was increased in length, but not in breadth or thickness. After careful dissection, it was found that two pelves existed, each connected with a separate ureter. On separating the ureters from the collection of fat which surrounded them, they were found to unite at the brim of the pelvis, and to enter the bladder in the normal manner. On section of the kidney along its greater curvature, the two pelves were found quite distinct and separate; there was no demarcation between the two portions of the organ; no fibrous band separated them, and the same capsule passed equally over both. The portion of the organ connected with the lower pelvisthe smaller one-was uneven and lobulated, and its pelvis was very large relatively to The renal tissue, the pelves, and ureters presented no morbid changes. Unfortunately, the vessels were divided before any malformation was discovered. Afterwards, in tracing its vascular supply, a large vessel, apparently a branch of the renal artery, was found entering at the hilum of the lower part of the organ in the usual manner. A small supernumerary vessel was connected with this portion of the organ, and entered its substance at the posterior surface. This branch it was thought was derived from the lumbar arteries. The vascular supply of the upper division of the organ appeared to be without irregularity. There was no peculiarity in the arrangement of the venous trunks.

The right kidney was surrounded by an immense quantity of fatty tissue. This organ was removed in connection with the aorta, the ureter, and the urinary bladder. The ureter likewise was surrounded by a collection of fat, measuring over an inch in diameter. On dissecting the fat from around the kidney, marked evidence of inflammation was found, and the same condition was noticed around the ureter. On section of the kidney-substance, the organ was found almost completely destroyed; its pelvis was greatly

dilated, and contained a large, irregular calculus, with a very rough surface; at the upper part of the organ was an abscess, containing very thick, purulent matter, and one or two small fragments of calculous material; at the lower part, the cavity of the pelvis reached nearly to the surface of the organ. The interior of the pelvis showed very marked alterations from inflammatory changes, and was covered with thick, creamy pus, shreds of tissue, and small calculous masses. vascular supply to this kidney presented no malformation; the calibre of the renal artery was very much reduced in size, from fibrous thickening of its wall. A calcareous mass was found in the aortic wall, at the point where this vessel was given off. The walls of the ureter were greatly thickened, and its mucous surface very uneven. The bladder showed very marked alterations from cystitis; in parts the mucous membrane was ulcerated, and showed calcareous incrustations.

The lumbar abscess had burrowed down along the crest of the ileum, and towards the lumbar vertebræ, without, however, involving the bony tissues. The abscess did not appear to be in any way connected with the diseased

There was a fracture of the fourth dorsal vertebra involving its body. The spinal cord at this part, for the distance of an inch, had been destroyed, and its tissues were absorbed. The inner membranes of the cord were greatly thickened and much injected.

Horseshoe kidney and anomalous ureter. Presented by Dr. John B. Roberts.

Anomalies in the form of the kidney occur quite constantly, and therefore deserve a certain amount of attention from us, though they do not represent pathological changes. Sometimes we have one kidney entirely absent, while the other shows no variation except, perhaps, an increase in size; again we may have the two organs united at the lower ex-tremities by an isthmus of renal structure extending across the spinal column, constituting what has been called the horseshoe kidney. These may have one or two ureters. The cases of fused or confluent kidney may, as is readily seen, present many variations; in fact, instances of quadruple kidney with four separate ureters have been recorded. Specimens of fusion of these organs have been presented to the Society at various times, but I believe they have not been so numerous as to render this malformed organ devoid of interest. The statement that the occurrence of renal anomalies is not infrequent I find substantiated by a list in the Transactions of the Pathological Society of London for 1861– 62 (vol. xiii.), which says there were at that time nineteen specimens in the museums of London, but it is not certain from the context that these were all examples of confluent kidney. A specimen similar to the present one

will be found in the first volume of our Pro-

This specimen before you was taken from a subject found in my dissecting-room at the Philadelphia School of Anatomy, and therefore we know little of the man to whom it belonged. The man had evidently died from injuries, and may, therefore, be supposed to have been in good health, especially as there was no great emaciation present. My attention was called to the anomaly after the abdomen had been partly dissected; and as there occurred no good opportunity of my dissecting the kidney, ureters, and bladder very carefully, I shall furnish a rather incomplete anatomical account of the specimen. As is seen, the right kidney is large, being about six inches in length, is of ordinary form, and is attached at its lower end to a rudimentary kidney about three and a half inches long. The normal organ occupied apparently the natural position, while the other lay across the spinal column in a more or less transverse direction, with its upper extremity located upon the belly of the left psoas magnus muscle, but not extending to the left of that muscular The left organ is very thin, and seems to have but little secreting structure, for a great portion of the mass is occupied by the pelves, as will be shown. The right suprarenal capsule was not seen by me, but there is a structure resembling the capsule above the small rudimentary kidney. There are many large arteries entering the hilum of the right organ, and a number of small ones going to the concave or upper surface of the left. In addition, a trunk the size of a small quill supplies the confluent organ at its lower surface where the two portions unite. Unfortunately, I am unable to say whence these vessels come. The vena cava and right renal vein are seen, with what seems to be the right spermatic vein emptying into the latter. This is also an unusual occurrence. The calices and infundi-bula of the right kidney open into a pelvis which is situated rather upon the anterior surface of the organ. The ureter is cut off at its commencement. At the anterior surface of the rudimentary portion of this horseshoe kidney are seen two pelves, which occupy the greater part of the front of the organ, which, by the way, has the appearance of being formed of two lobes. These pelves go downwards from the lower convex edge, and join together about half an inch distant from the The tube point where they leave the kidney. at that point is about one inch in diameter.

In order to see what was the condition of the ureters at their entrance into the bladder, since the portion intervening is lost to us, I secured the latter organ, after the subject was left by the students, and present it to the Society with the other specimen. The right ureter is of the usual appearance, and enters the bladder by a slit-like orifice; above this orifice a blind pouch runs up from the mucous

surface of the bladder alongside of the ureter for about one and a half inches, large enough to admit a lead-pencil most of the distance. On the left side there remains attached to the bladder the stump of a tube nearly one inch in diameter, which is evidently the cystic end of the large ureter formed by the junction of the two pelves of the rudimentary left kidney. This opens into the bladder by a mere slit at its bottom, similar to the orifice upon the right side. Alongside of this there is a cul-de-sac leading from the cavity of the bladder upward, large enough to admit the little finger for nearly an inch. It is certainly strange that such a large ureter should come from the rudimentary organ, while the tube is but little larger than usual on the right side, where was situated the kidney which secreted nearly all the urine.

Acute miliary tuberculosis. Presented by DR. Morris J. Lewis.

Jane McD., æt. 4 months, the patient, was brought to the Children's Hospital, for the first time, January 29, 1879, suffering apparently from indigestion. The child was bottle-fed, and had been ailing since ten days old, the principal symptom being colic. Dr. Starr, who saw her first, treated her accordingly, as there was nothing to call attention to any

more serious trouble.

Three days later I saw her for the first time. She was then brought back to the hospital with slight cough, which had developed in the interval. Examination revealed bronchial râles, large and small, over both lungs, anteriorly and posteriorly, and but slight, if any, change in percussion-note. She was placed upon the ordinary cough-mixture of the hospital, and the mother told to return if the child became worse. Six days later, February 7, she was brought back, with a short, hard, paroxysmal cough, which occurred at intervals of every few minutes, and which evidently caused pain, as the child cried with each paroxysm. The respiration was hurried, and examination revealed considerable impairment of resonance over right lung posteriorly, with increased tussive fremitus. Auscultation revealed slight bronchial breathing on right side, and moist râles with both acts of respiration. The left lung was the same as at last visit, except that slight impairment of resonance was detected. After this I attended the child at its home, where the following history was obtained. The child's grandmother and maternal aunt died of consumption; the mother has considered herself delicate for some years, and has had winter cough, and muco-purulent expectoration. Examination revealed a small vomica at right apex posteriorly, and crackling anteriorly. The father is a healthy man, and his family history good.

The patient was the first child, and, as the mother was unable to nurse her after the

tenth day, she was fed from the bottle. The parents considered the child moderately healthy, with the exception of frequent attacks of colic, which were attributed to the manner of feeding. She had never had convulsions, and her bowels had been moderately regular.

The child was pale and thin, with a moderately protuberant belly. The respiration was hurried, being 60 per minute, and mainly diaphragmatic, the movements of the chest being slight, and principally those of elevation, and not of expansion, the left side moving more than the right. The pulse was regular and rapid, averaging 160 per minute. Examination showed dulness over right lung from apex to base posteriorly, while anteriorly it was not so marked. Over left lung there was but slight impairment of resonance, either anteriorly or posteriorly. Auscultation revealed blowing respiration, with a few bronchial râles, and no crackling over right lung, and exaggerated breathing over left lung, with bronchial râles. Examination was made under considerable difficulties, as the child coughed incessantly, when raised from the bed, and cried when moved; the only position in which she could rest at all was upon the right side. The child's appetite was capricious, some days refusing nourishment, and again taking it with avidity.

After this the symptoms gradually became more severe, and two days before death Dr. Hopkins saw the case with me. The movements of the right chest had then almost ceased, and the lower ribs bulged slightly, while upon the left side the movements had somewhat improved. Auscultation revealed coarse crackling râles over roots of both lungs, with absolute dulness on percussion on right side. Cyanosis had made its appearance, the nails, knuckles, and forehead being very dark, and the child was in a profuse perspiration. Both eyes were turned upwards and to the left. The next day she had a slight convulsion, which was not general, and lasted a few minutes only. The following day she died, February 18, 1879. During the attack the pulse remained about 160, and the respiration 60 per minute. The temperature varied from 101° F. to 102½° F.

The autopsy was made twenty-two hours after death, with the assistance of Dr. Starr:

Decomposition commencing in abdomen. Child thin and emaciated. Head normal in size and shape; ribs bulged slightly towards lower part of chest, and there was slight beading of their anterior extremities, but no enlargement of lower end of radii. Pleural cavities contained no abnormal amount of fluid; some few adhesions, not firm, existed upon right side posteriorly, none on left. Mediastinal glands enlarged. Right lung hepatized and non-crepitant, sinking in water, its pleura studded with numerous miliary tubercles about the size of a grain of sand. Upon section, numerous cheesy deposits were seen.

Towards lower part of upper lobe, posteriorly, a cavity was found, measuring about threequarters of an inch by an inch, and filled with broken-down cheesy material. Left lung but slightly congested, floating in water, its surface covered with distended vesicles, particularly over upper lobe, and studded with tubercles. At lower part of upper lobe a cavity smaller than that on the right side was found. On section, some few cheesy deposits. No tubercles could be detected on costal pleura. Pericardium contained a small amount of serum. Heart firm and apparently normal. No tubercles seen. Liver somewhat large, free from adhesions, and studded with miliary tubercles upon both its upper and lower surfaces, varying in size from a grain of sand to a head of a pin. Spleen large, adherent over small area by fresh lymph to abdominal wall, and studded with tubercles, some of which were as large as half a grain of rice. Kidneys apparently healthy. Intestines studded here and there with solitary tubercles, especially over ileum, and one or two small ulcers were detected, having the position of Peyer's patches. Mesenteric glands enlarged. No tubercles discovered on parietal peritoneum. Unfortunately, no examination of the head was allowed.

# REVIEWS AND BOOK NOTICES.

A PRACTICAL TREATISE ON SURGICAL DIAGNOSIS; DESIGNED AS A MANUAL FOR PRACTITIONERS AND STUDENTS. By AMBROSE L. RANNEY, A.M., M.D., Adjunct Professor of Anatomy and Lecturer on Minor Surgery in the Medical Department of the University of New York. 8vo, pp. 386. New York, William Wood & Co., 1879.

With the exception of Macleod's "Outlines," published simultaneously in England and in this country in 1864, this is, so far as we know, the first monograph ever issued on surgical diagnosis. The subject is one of such interest and importance that one may well wonder at its having been thus avoided by writers; but the success of Macleod's work did not, we believe, warrant a second edition.

The volume before us is handsomely gotten up, with good type and paper, but an examination of its pages has sadly disappointed us. The tabular arrangement of the material makes the book unreadable, and many of the statements are so singularly vague that we confess our inability to unravel their meaning. For example: Dr. Ranney says of fissures of the skull, "if the scalp or periosteum be not involved, in that case the symptoms of a possible complicating hemorrhage of the meninges of the brain, or the development of symptoms of local abscess within the skull at the seat of injury, might give grounds for a reasonable conjecture" (p. 140).

Again, in speaking of fractures of the hip: "We may safely exclude all fractures of the pelvic bones from the causes of error in diagnosis of injuries received in the region of the hip-joint, provided no evidences of previous disease are present, since, if the fracture of these bones be severe and extensive, the location of the crepitus and symptoms referable to the pelvic viscera will easily remove all doubt. Should the fracture be of a local character, however, and not of the comminuted variety, it is often impossible to either positively diagnose the existence of a fracture or to locate its situation, provided even that crepitus be obtained" (pp. 179, 180).

Of aneurismal varix we are told: "The pa-

of aneurismal varix we are told: "The patient is conscious of the peculiar fremitus, which affects the sleep and leads also to the belief that an insect is imprisoned" (p. 21).

These extracts are taken at random, and

are fair samples.

In the Introduction, which is more properly a mere preface, we find our author making the extraordinary statement, "I have avoided, as far as possible, all points on which argument is demanded or from which serious error is liable to follow." Perhaps this may explain why he has omitted all mention of sounding as a means of diagnosis of stone in the bladder; why he wholly ignores the nose, airpassages, eye, and œsophagus; and why he says nothing of gunshot-wounds.

What is really wanted, and what we hoped to find in this book when we took it up, is a treatise analogous to those of Da Costa and Barclay on the medical branch of the subject, in which the means of diagnosis, the methods of employing them, and the significance of their revelations should be fully set forth. A bare tabulation of distinctive features of disease may sometimes save a lazy man the trouble of consulting authorities, but no earnest student or practitioner can find it satisfactory.

We honestly think that, had the author's private classes known just what sort of a volume this would be, they would not have requested him to publish it.

P.

THE AMERICAN JOURNAL OF OTOLOGY: A QUARTERLY JOURNAL OF PHYSIOLOGICAL ACOUSTICS AND AURAL SURGERY. Edited by CLARENCE J. BLAKE, M.D., in conjunction with Prof. A. M. MAYER, of Hoboken; Dr. Albert H. Buck and Dr. Samuel Sexton, of New York; Dr. C. H. Burnett, of Philadelphia; Dr. J. Orne Green, of Boston; and Dr. H. N. Spencer, of St. Louis. Vol. i., Nos. 1 and 2, January and April, 1879. New York, William Wood & Co.

The object of this most recent addition to our special medical journals is twofold: first, to afford a medium for the publication of memoirs relating to acoustics; second, to present papers upon practical otology in its widest

sense. An inspection of the title-page shows how well this double object is likely to be attained, for on the one part we have the name of Professor Mayer, the distinguished physicist, and on the other the names of a group of aural surgeons all well known as active in their special branch and as contributors to the literature of the subject. An examination of the two numbers already issued shows the promise of the title-page well borne out by an array of valuable contributions, ranging from such articles as that upon "Proposed Methods of Measuring the Relative Intensities of Sounds" to the "Treatment of Inflammation of the External Auditory Meatus." There are also in each number careful book notices. and a thorough and complete review of current otological literature. Finally, the literary make-up of the journal is handsome and attractive, and it presents itself with an assured carriage, as if it knew its own value and "had come to stay."

ELEMENTS OF COMPARATIVE ANATOMY. By CARL GEGENBAUR. Translated by J. JEFFREY BELL, B.A. Translation revised by E. RAY LANKASTER, M.A., F.R.S.

This work appears to us to be the best of its kind in the English language: thorough and full of the modern scientific spirit, it represents completely the knowledge of the present, and, whilst good as a hand-book for students, it may serve for a guide to the profession.

THE American Health Primers, edited by Dr. W. W. Keen, are a series of small volumes to be offered to the lay public at the price of fifty cents each. Whilst the enterprising publishers, no doubt, hope to earn lucre, practically the effort is allied to a missionary enterprise, and as such we wish for it success. If the other volumes be as good as the first, which is just out,—namely, "Hearing, and How to Keep it," by Dr. Charles H. Burnett, of this city,—the array will be a very striking one.

Part III. of Klein's Atlas of Histology has been received. The punctuality of its appearance seems to equal the merit of this remarkably excellent publication. The plates of the present number illustrate fibrous, connective, and adipose tissue, pigment cells, formation of capillary vessels, and cartilage. In accuracy and in artistic qualities they are the equal of those previously published.

Danger of Vulcanized India-Rubber Nipples.—An item is going the rounds of the medical press relative to two cases of poisoning reported as occurring in young infants who had used white vulcanized rubber nipples. The poisoning was said to be due to the sulphide of carbon used in vulcanizing the rubber.

# GLEANINGS FROM EXCHANGES.

CHLORAL AS AN ANTIDOTE.-Prof. Husemann, of Göttingen, has been engaged in a long series of observations on the antagonistic and antidotal actions of drugs, and some of his investigations which relate especially to chloral are described in a recent number of the Archiv für Exper. Pathologie, Of these the following is a summary. Chloral hydrate is known to act as an antidote to strychnine, lessening the spasm, and even preventing death. It has a similar action in the case of the mixture of strychnine bases sold under the name of brucin, and also against the opium alkaloid thebaia, which simultaneously tetanizes and lessens sensibility. The spasms produced by chloride of ammonium diminish under the employment of non-fatal doses of chloral hydrate, and can indeed be completely stopped. Nevertheless death occurs, probably from the paralyzing effect of both substances on the respiratory centre. The antidotal effect of chloral on the action of the poisons which cause convulsions by their action on the brain is not the same for all these substances. The quantity of the poison which can be counteracted by the antidote appears to be considerably greater in the case of picrotoxin than in the case of codeia. Of the latter, indeed, the fatal dose, and even a quantity half as much greater, can be rendered harmless, but twice the fatal dose cannot be counteracted, and is still fatal. Calabarin is counteracted by chloral hydrate in about the same degree as codeia. The symptoms produced in rabbits by poisoning with baryta are not materially altered by the action of chloral, which does not appear to prolong life. So also with carbolic acid: the spasms produced by it are not arrested by chloral, and the minimum dose fatal to rabbits still produces death. The combination of a fatal dose of carbolic acid with a non-fatal dose of chloral hydrate causes in rabbits a remarkable fall of temperature, which is not produced by the action of these alone. As a rule, when chloral antagonizes the action of these cerebral poisons, the respiration sinks in frequency much more than in the case of the analogous action of chloral on the tetanizing poison. The depression of temperature caused by the chloral is almost independent of any peripheral loss of heat. The elevation of temperature due to division of the spinal cord is hindered by chloral hydrate. The depressing action of thebaia and codeia on the cerebrum, which is distinctly perceptible in many animals in addition to their action in causing spasm, is the chief effect recognizable in man. On the one hand, thebaia has a distinct action in lessening pain; and on the other, in human poisonings with this opium alkaloid, chloral hydrate is of little use, and in the case of poisoning by codeia, on account of the collapse which is produced, it is positively inju-

rious.—Lancet, vol. i., 1879, p. 382.

CONINE AND ITS SALTS.—The Annuaire de Thérapeutique for 1879, edited by M. Bouchardat, gives an abstract of an inaugural thesis by M. Tiryakian, on conine and its salts, which possesses considerable interest. The experiments were performed in the laboratory of M. Vulpian, and the conclusions arrived at were as follows. Conine or conicine is a very unstable substance. As com-monly sold it is very impure, and gives very variable results; when pure it has a powerful irritant and even caustic local action. Its hypodermic use should therefore be a subject of careful consideration, and should not be rashly adopted. It appears to be more active when ingested into the stomach than when injected subcutaneously. In the latter case it does not completely disappear, the channels of absorption being partially destroyed by its local action. Hence it should, as a rule, be administered by the stomach. It acts as a poison, both on man and on animals; but the organism speedily tolerates it, and owing to this toleration it is necessary constantly to augment the dose. There is no danger, under these circumstances, of a cumulative action being exerted, since conine is rapidly eliminated from the system. Conine is neither a muscular nor a cardiac poison; it acts essentially on the cerebro-spinal centres. The substance which acts on the peripheral extremities of the motor nerves is not conine; it is a kind of empyreumatic essential oil, which M. Mourrut has extracted from conine supplied from Germany, and which probably exists in all commercial specimens of the The chlorhydrate and bromhydrate of conine are stable salts; they induce symptoms which are identical with those of conine itself, but are more energetic. The fatal effects of a poisonous dose of these substances seem to be due to asphyxia. Physiological antagonism between conine and strychnia is possible, but has not yet been demonstrated. The convulsions caused by strychnia can, however, be suppressed by conine. To obtain any sensible effect of the bromhydrate of conine in an adult man a dose of at least 1.5 grains is required, and the dose may be increased to three, four, or five grains, according to the effect produced or the tolerance on the part of the patient. It is rapidly eliminated by the lungs, and the doses should therefore be given in close succession. As much as fifteen grains of conine may be given in twenty-four hours, in pills or syrup. symptoms produced are, great muscular weakness; lassitude; fatigue; heaviness of the eyelids; heaviness of the head; difficulty of walking; sleep, or often, rather, a state of torpor without sleep. The intellectual faculties are perfectly preserved. There is no aberration of the sensibility, except sometimes slight hyperæsthesia and tingling of the fingers

and toes, but it is never perverted or diminished. Vision is sometimes temporarily disturbed, objects being seen as through a fog. There is no cephalalgia or vertigo. The pupils undergo no alteration. The pulse remains unchanged. There are no disturbances of the digestive tract; neither nausea. vomiting, nor diarrhœa. Respiration, secretion, and the temperature of the body are unaltered. Infants at the breast are not affected by conine when this is administered to the mother, and they bear small doses well. The author believes that conine will be found to be of service in bronchitis or phthisical cough, and in nervous cough: in whoopingcough; in epilepsy; in neuralgic and articular It is rationally indicated in cases of hyperæsthesia; in chorea, convulsion and trembling, and in tetanus.—Lancet, April 26, 1879.

ELASTIC PRESSURE IN THE TREATMENT OF INFLAMMATION OF THE JOINTS. -- Mr. Rushton Parker, in reply to the arguments of Mr. Keetley in favor of hydraulic compression, says that he opposes compression from practical experience. The repeated pressure inseparable from flexion in the use of a kneejoint, the subject of hydrarthrosis, is a frequent and often the only obstacle to speedy recovery. It must be admitted that concentric compression from without increases the fluid tension within a sac containing fluid. Whether or not the absorption of that fluid be thereby promoted is another matter. Mr. Parker thinks that facts do not bear out this theory; compression is not followed by absorption of the fluid. Synovitis of the knee often gets well after the application of fomentations, iodine, etc., and even when wholly untended and unprotected from use. The question is, What is the treatment under which no case shall get worse, and for mere want of which any case may fail to get well, and the laws governing the use of treatment? Mr. Parker thinks the plan he is accustomed to follow answers this question. He fixes the joint by means of a back-splint or a number of adhesive strips; then aspirating the joint, when this seems needful, in both synovitis and bur-There are certain measures which Mr. Parker unhesitatingly condemns. Among these are blistering, firing, the so-called passive motion, and, equally, the too early recommendation of voluntary motion. solid-rubber bandage he also condemns. As for the various mercurialized, iodized, or improvised applications, he considers them as useless but harmless incantations which are not without their psychological uses as

placebos."—Lancet, vol. i., 1879, p. 589.

A HIGHLY VASCULAR NÆVUS TREATED BY INTERSTITIAL INJECTION OF A FIFTEEN-PERCENT. SOLUTION OF CANTHARIDINE IN CHLOROFORM.—On September 21, 1878, a child was brought to the Hôpital Saint-Antoine, bearing in the inguinal region a prominent nævus of bright-red color, the size of a large

hazel-nut, from which, from time to time. slight hemorrhages took place, which led its mother to seek a cure of the little tumor. On the 22d there was injected half a gramme of the solution, containing seven and a half milligrammes of cantharidine; at the moment the child cried, but in half an hour was quiet. Two hours after, it complained of smarting and pain in the tumor; three hours after, a congestive zone around the nævus; twelve hours after, a vesicle; and in twenty-four hours, an eschar, which enlarged the following days; fourth day, eschar very distinct, and several small vesicles in the healthy skin around the nævus. About the twelfth day eschar completely formed, and on the twentieth commencement of line of separation on a level with healthy skin; for the eschar was not exactly limited to the tumor. One month after, eschar on the point of falling, and in two months there remained a slight wound. with tendency to heal; two and a half months after, the cicatrization was complete, with tendency to diminish. Finally, three months after, there remained but a superficial scar, without any appearance of the vascular tumor.-From the French.-Chicago Medical Journal and Examiner, May, 1879.

SPONTANEOUS FRACTURE OF FEMUR AT THE SEAT OF A SYPHILITIC NODE.—The following cases occurred in Mr. Hutchinson's wards, in the London Hospital. A girl of 17, the subject of inherited syphilis, and suffering from an enlargement of the femur, while standing before a shop-window one day, suddenly felt her right leg give way under her, and she was unable to stand. On being taken to the hospital, she was found to have an oblique fracture of the right femur, about the middle third. The second case was that of a lad apparently about 12 or 13 years of age, who showed an ovoid, ill-defined swelling apparently of the bone itself, situated about the middle of the thigh. No history of struma, phthisis, cancer, or syphilis in the family. The growth had been increasing since it was first noticed, twelve months previously. There was lancinating pain, worse at night, along the course of the external cutaneous nerve. Believing that this might be a syphilitic node like the former case, and that there was danger of fracture, Mr. Hutchinson ordered iodide of potassium and directed that the boy should be kept quiet.— Medical Times and Gazette, vol. i., 1879, p. 348.

CASE-TAKING BY NOTATION.—Dr. Henry Veale describes a method of taking notes by the use of certain abbreviations and signs for the various parts of the body, organs, conditions, etc., which should be of value to hospital registrars and others obliged to note large numbers of cases with all practicable fulness. The method requires some little study to master, but must repay the student in the long run. It may be found in the *British* 

Medical Journal for March 15.

# MISCELLANY

THE SANITARY CONDITION OF MALTA. Mr. Plimpsoll, the well-known English philanthropist, has been investigating the sanitary condition of Valetta, where, it appears, the poor population live chiefly in cellars. He

says of these cellars or pits,—
"They have no fireplace, and therefore no chimneys, and serve singly for a whole family, -man, wife, and children. They have no windows, and some have no other aperture of any kind than the door; and when you have reached the bottom of the well you find the floor, the solid rock, wet with urine and foul with the ordure of the children. So little air reaches the bottom that the floor of the yard or well never dries, and so little light that when you are asked to enter and stand in the doorway it is dark as pitch, and you have to light a wax match to avoid falling down the two or three steps within the doorway. . . . The excrement in many of them is put into a box over the sewer, about twenty inches square and high. It goes right down into the untrapped sewer, and there accumulates in the dry season, unmixed with ashes or dry dust of any kind."

In one of these filthy dens, under a handsome house in the Strada Maza Muscetto, the writer found, in an area of sixteen hundred and ninety-two feet, three stories or tiers of six cellars in each, and in the lowest of all above thirty people were living, thirty-nine feet below the level of the street. The yard was only eleven feet wide, and the walls to the sky-line were ninety feet all round.

With such sanitary arrangements, it does not surprise us to learn that the death-rate in 1874 was 49.24 per 1000 of population.

LEAD-POISONING FROM BEER. — A bartender, engaged in a large hotel, being the first down-stairs in the morning, was accustomed to draw and drink beer from an engine which had not been turned off or exhausted at the cellar the previous night. After he had pursued this practice for a week, he experienced a sweetish astringent taste, and suffered from uneasiness of the bowels. These symptoms increased, and when, at the end of three weeks, he sought advice of Dr. Hewett, who reports the case, he had colic, a well-marked lead-line about the gums, and symptoms of paralysis of the left arm. An analysis of the contents of one of the pipes showed lead present to the extent of 0.26 gr. per gallon.—

British Medical Journal, April 12, 1879.

REMARKABLE GROWTH OF HAIR.—At one

of his lectures delivered at the College of Physicians a year or two ago, Mr. Erasmus Wilson, of London, showed the photograph of a lady of 28, five feet five inches in height, whose hair when standing up enveloped her like a beautiful golden veil, trailing many inches on the ground. The longest hairs upon this lady's head measured six feet three

inches and a half in length. Thirty inches is the full average length in women, a yard being considered a fine and unusual growth. This, therefore, is a very extraordinary length

of hair,—the longest, we believe, on record.
PRECAUTIONS AGAINST THE PLAGUE IN
LIVERPOOL.—A Swedish steamer laden with rags from Libau, having arrived in the Tyne docks, has been placed in quarantine. So vigilant were the authorities that a man who had gone on board in the ordinary course of business was detained, and not allowed to return on shore until he had been "fumigated.

THE PARIS FACULTY OF MEDICINE. - M. Brouardel has been chosen to the chair of Legal Medicine, succeeding the late Ambroise Tardieu. M. Laboulbène follows Prof. Parrot in the chair of the History of Medicine, the latter taking that of Diseases of Children.

THE death of Dr. Charles Murchison is announced. He had been suffering for some time with cardiac disease, but his death was quite sudden, occurring in the interval between seeing two patients in his office. Dr. Murchison is chiefly known in this country by his classical work "On Fever."

"To SUPPLY A WANT LONG FELT."-The number of journals relating to the medical sciences published at Paris amounts to

eighty!—Lyon Med.

#### OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY FROM MAY 18 TO MAY 31, 1879.

SURGEONS C. T. ALEXANDER and D. L. HUNTINGTON and ASSISTANT-SURGEON H. LIPPINCOTT appointed a Board to assemble, June 2 proximo, at Military Academy, West Point, N.Y., for examination of physical qualifications of members of graduating class and of candidates for admission to Military Academy. S. O. 122, A. G. O., May 23, 1879.

STORROW, S. A., MAJOR AND SURGEON.—Relieved from duty at Fort Laramie, and assigned to duty as Post-Surgeon at Fort D. A. Russell, Wy. T., relieving Major J. R. Gibson, Surgeon. S. O. 45, Department of the Platte,

O'REILLY, R. M., CAPTAIN AND ASSISTANT-SURGEON, Mc-Pherson Barracks, Atlanta, Ga., granted leave of ab-sence for one month, with permission to apply for an extension of one month. S. O. 84, Department of the South, May 28, 1879.

De Witt, C., Captain and Assistant-Surgeon. — Relieved from duty at Fort Fred. Steele, Wy. T., and assigned to duty as Post-Surgeon at Fort Sidney, Neb., relieving Captain C. E. Munn, Assistant-Surgeon. S. O. 45, c. s., Department of the Platte.

SHANNON, W. C., FIRST-LIEUTENANT AND ASSISTANT-SUR-GEON, Fort Clark, Texas, granted leave of absence for one month, with permission to leave the Department, to take effect when relieved from duty with Tenth In-fantry, now en route to Department of the East. S. O. 101, Department of Texas, May 14, 1879.

LA GARDE, L. A., FIRST-LIEUTENANT AND ASSISTANT-SUR-GEON.—Having reported in person at these Headquarters pursuant to orders from Headquarters of the Army, as-signed to duty at Cantonment on North Fork of Cana-dian River, Indian Territory. S. O. 101, Department of the Missouri, May 23, 1879.

Kinsman, J. H., Captain and Assistant-Surgeon.— Granted leave of absence from March 21, 1879, to September 21, 1879. His resignation accepted by the President, to take effect September 21, 1879. S. O. 117, A. G. O., May 17, 1879.

# PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, JUNE 21, 1879.

# ORIGINAL LECTURES.

CLINICAL LECTURE
ON THE TREATMENT OF SEBOR-

Delivered at the Pennsylvania Free Dispensary for Skin Diseases, 920 Walnut Street, Philadelphia, Pa. BY JOHN V. SHOEMAKER, A.M., M.D.

Reported by J. H. SARGENT, M.D.

SEBORRHŒA OLEOSA.

THE treatment in seborrhœa oleosa consists in the use of both general and local remedies. It is necessary, in the first place, for this patient to have plenty of fresh air, daily exercise, and the most nourishing food. The iron preparations are required on account of the anæmic condition of the patient. The tincture of the chloride of iron will be the most suitable, in fifteen-drop doses three times daily, in a wineglassful of water. Should constipation follow, a change can be made to the syrup of the lactate of iron. The liberal use of bitter tonics, the mineral acids, and the preparations of pepsin, are often demanded in this affection.

The local treatment is of the utmost importance. The disease is usually stubborn, and only yields after patient and careful attention to the parts. The patches may be washed frequently with a mild soap, and dusted over with either starch, bismuth, lycopodium, or precipitated carbonate of zinc. The use of the cold bath will be of great service, by causing the enlarged glands to contract; the application of a mild stimulating lotion of acetate of lead and sulphate of zinc will also prove very beneficial in many cases.

I would, however, more particularly recommend for this patient a mild stimulating soap which I call sapo matricariæ sulphurisque. Each cake is composed of one and a half ounces each of oil of theobroma and olive oil, two drachms of powdered German chamomile flowers, one drachm of precipitated sulphur, and one ounce of a weak solution of caustic soda. This soap has been prepared, at my suggestion, by Mr. L. Wolff, a competent chemist and pharmaceutist of this city. I have several very fine specimens of this soap, which I will pass around for your inspection. You will notice that it has a very pleasant and agreeable scent. All these spots should be well washed with it every other evening just before retiring.

SEBORRHŒA SICCA

I next present this patient, James R., a book-keeper, to years of age, having a large collection of scales over the scalp and a portion of the back and chest. crown and sides of the head are covered with dry scales and thick crusts with adherent hairs. Over some portions of the head the crusts are firmly adherent to the scalp, while upon other parts the scales are loosely situated, and in falling off cover the patient's clothes with a scurfy material. Upon removing some of the thickened crusts from the crown of the head, masses of sebum are found to be prolonged down in many of the follicles, some of the ducts are obliterated, and the scalp is also red and swollen. It likewise presents some spots having a dull and withered appearance. The hair is dry, lustreless, and very thin, and the patient complains of a constant itching sensation of the scalp. These masses of sebum that plug up the follicles interfere with the growth of the hair, and cause all this unhealthy state of the scalp and the hair, and often end in premature baldness.

The secretions of these glands that are so abundantly developed on the scalp are very great during the intra-uterine period. The first years of the child's life this excessive secretion frequently continues, and when neglected and allowed to collect dust and dirt, it irritates the skin and often produces eczema. In old age and in syphilis the scalp is sometimes covered with these dirty yellowish masses of sebum, which cause the loss of hair in the latter affection.

Upon the patient's back, between the scapulæ, and over the chest, mainly on the sternum, are dirty yellowish crusts in large numbers in both localities; some of these patches are small (about the size of a silver five-cent piece), and others are large from several of them coalescing. The skin of both the back and chest is slightly greasy. A small number of scales are observed scattered about the patches, and the ducts of the follicles are open and filled with sebum. These sebaceous crusts exist in some cases on the forehead, nose, and cheeks, and both Biett and Bazin relate cases in which the sebaceous glands over the whole surface were filled with inspissated sebum. The

genital regions of both sexes are frequently attacked with seborrhæa on account of the parts being so abundantly supplied with sebaceous glands. In the male, the glandulæ Tysonii seu odoriferæ of the corona glandis and of the cervix of the penis secrete a peculiar, soft, white, and caseous material, which frequently becomes copious, rapidly decomposed (especially when the prepuce is long), gives off an unpleasant odor, and occasionally causes balanitis. In the female these sebaceous glands are situated around the labia and clitoris, and frequently pour out the secretion in large quantity, giving rise to a diseased condition of the parts. This patient has a tuberculous family history; it is evident on his countenance. His hair and complexion are both light, and his extremities are cold. showing the feeble state of the circulation. In addition, he has been troubled for some vears with constipation, and this, by reflected irritation, has caused this seborrhœa sicca. Tuberculous subjects are especially disposed to both seborrhæa and acne. The causes I mentioned in connection with the first case may likewise bring about this same form of seborrhœa, provided the solid principles of the sebum, the stearin and margarin, predominate.

Seborrhœa might be mistaken for eczema or lupus erythematosus. It differs from lupus in the following points: should a crust or scale be removed in seborrhœa, it will be found to be prolonged down in the follicle, the skin beneath being pale or slightly reddened, while in lupus the part is both reddened, swollen, and infiltrated. Again, seborrhœa is a functional disorder, and is never followed by scars, while lupus is a new cell-growth, and there is always a tendency to repair by the formation of cic-

The treatment for the patient will be both local and constitutional. He should take daily exercise and plenty of good nourishing food. I shall also prescribe a bitter tonic three times daily, and the extract of malt, one tablespoonful in a glassful of milk, with meals. As soon as the patient's digestive organs are in the proper condition, we will change these remedies for one tablespoonful of cod-liver oil, with ten drops of the syrup of the iodide of iron, three times daily one hour after meals. The following mild aperient pill will be very beneficial for the sluggish condition of the bowels: powdered aloes and

rhubarb, each, twenty grains; extract of hyoscyamus, six grains; extract of belladonna, one grain; oil of cinnamon, one drop. Make twelve pills. Dose, two every other night when necessary.

The crusts and scales must be removed by oil dressings. The patches on both the head and body should be soaked with olive oil until the masses become soft and can be easily removed. If, however, the crusts on the head should still adhere, a flannel cap saturated with oil and covered with oil-silk should be tied on at bedtime, and allowed to remain about ten or twelve hours. After the crusts and scales have been thoroughly macerated, the dressing should be removed and the parts well washed with tepid water and the sapo matricariæ sulphurisque. About every second or third evening a copious lather should be made from the soap, and actively rubbed into the scalp and the patches over the body. The parts should then be sponged with tepid water and rubbed dry with a rough towel. I have used this medicated soap, in dispensary and private practice, in seborrhœa and various scaly eruptions, with remarkably good results. In seborrhœa it will cause the enlarged glands to contract. the skin to become healthy, and the disease to disappear.

After using the soap, the following preparation will be a very good and elegant application to lubricate and soften the dry condition of the hair and the scalp: beefmarrow, two ounces; white wax, half an ounce; tannate of quinia, one drachm; balsam of Peru, three drachms; oil of rose, five drops; oil of verbena, three drops; essence of ambergris, half a drachm. Mix, and use daily as a pomade.

# ORIGINAL COMMUNICATIONS.

ON COWS' MILK AS FOOD IN HEALTH AND FOR INVALIDS.

BY J. CHESTON MORRIS, M.D.

Read before the Philadelphia County Medical Society, March 12, 1879.

I ASK the attention of the Society tonight to a subject of the greatest importance to us, both as citizens and physicians, especially as the latter. On the proper feeding of our patients much of our success in treatment must depend, and not only so, but as guardians of the public health we are bound to point out causes of disease, and use every means in our power to diminish or obviate them. I feel, therefore, that I need not apologize for bringing before you for discussion not only the subject of milk, but its supply in Philadelphia, the necessity of its being pure, abundant, and wholesome, and some suggestions for its improvement.

In the first place it may be well to consider the constitution of milk, its advantages as an article of food, and the quantity required by an adult for the full performance of the bodily functions.

Simon, in his "Animal Chemistry" (Sydenham Soc. translation, vol. ii. p. 62), gives several analyses, from which the following may be deduced as being, practically, nearly the average composition of good milk:

Water . . . 860 parts in 1000. Solids . . . 140 " "

The latter are apportioned as follows:

Its specific gravity varies (with food, etc.) between 1.030 and 1.035; that of cream is 1.024. A quart of milk, therefore, would weigh, at 60° F., about 15,092 grains, of which 12,979 grains are water and 2113 grains solids. Of the latter there would be—

If now we seek to ascertain the amount of nutriment required by the average man in health, we shall find great variety and wide divergence in the views of different authorities, but from them we select the following, which may enable us to form an approximately correct idea. Lehmann ("Phys. Chemie," iii. p. 364) quotes Valentin, weighing fifty-three kilogrammes, as taking two thousand nine hundred and twenty-four grammes of nourishment in twenty-four hours during his experiments on himself. He also infers from Bidder and Schmidt's experiments, and from those of Chossat on inanition (ib., iii. p. 378), that the weight of food properly proportioned should be to the animal as one to twenty-three. Béclard also ("Phys. Humaine," p. 571) states the proper proportion of food for man at one-twenty-fifth to one-twentieth of his weight. He gives the ration of the French cavalryman as follows:

		G	rammes	s. O	unces av.
Fresh meat .			125	or nearly	4.4
White bread.			516	66	18.2
Hard bread .			750	4.6	26.4
Peas, beans, e	tc.		200	44	7.0
			1591		56.0

This probably contains too large a proportion of carbo-hydrates, and is deficient in azotized elements. Carpenter gives the ration of the British navy as thirty-five ounces dry nutritive material, of which twenty-six ounces are vegetable and nine ounces animal. Some information pertinent to our subject may also be gathered from the dietaries of the London hospitals as given in Pereira's "Materia Medica." He states that of St. Thomas's ("milk diet") to be three pints of milk and twelve ounces of bread daily. This would make, according to the analysis given above,

Or nearly 20 oz. av. in all.

But of this the butter may be valued relatively to the bread (according to Liebig and Lehmann) as ten to twenty-four. The sugar also would have a higher nutritive value than bread; so that this diet might be estimated at twenty-three ounces for comparison. This is evidently below the requirements of a healthy individual. Pereira also quotes Christison as estimating forty-eight ounces (three pints) new milk at eight ounces of dry nutritive material in a diet for a diabetic patient amounting in all to twenty-two ounces animal matter. Béclard estimates that of the kilogramme (fifteen thousand four hundred and thirtytwo grains, or two and one-fifth pounds avoirdupois) of dry nutritive material required for a healthy man (in conjunction with one and three-quarters kilogrammes of liquid) to meet the daily requirements of tissue metamorphosis, one-seventh should be animal and six-sevenths vegetable. This would give two thousand two hundred and four and a half grains, or a little over five ounces, of meat daily, - a proportion slightly exceeding that of the French cavalry ration.

The diet of the peasantry of Sweden, Norway, Switzerland, Tyrol, etc., consists, according to Edward Smith ("Foods," p. 318), mainly of four to seven pints of milk daily, while the Irish laborer subsists on four pints of buttermilk, with potatoes, etc. A. Maclaren ("Training in Theory and Practice," Appendix II., p. 188) gives the following diet-tables:

8		Dry.	Liquid.
Meat (cooked)		. 6 oz.	
Fish		. 4 ''	
Bread		. 10 "	
Potatoes .		. 8 "	
Rice		. 2 "	
Sugar		$2^{\frac{1}{2}}$ "	
Butter		$2\frac{1}{2}$ "	
Milk		• •	. 5 oz.
Coffee ,			. 16 "
Tea			. 10
Water			. 17 "
		35 "	54 ''
		35 " Dry.	54 '' Liquid.
Bread		Dry 16 oz.	54
Bread Peas		Dry. . 16 oz.	54
Dese	0 0	Dry 16 oz 3 ''	54
Peas	•	Dry. . 16 oz. . 3 "	54
Peas Bacon	•	Dry. . 16 oz. . 3 "	Liquid.
Peas Bacon Cheese	•	35 Dry. . 16 oz. . 3 " . 4 " . 2 "	54 Liquid.
Peas Bacon Cheese Milk	•	35 Dry. . 16 oz. . 3 '' . 4 '' . 2 ''	54 Liquid. , 8 oz.
Peas Bacon Cheese Milk Coffee	•	35 Dry. . 16 oz. . 3 '' . 4 '' . 2 ''	Liquid.
Peas Bacon Cheese Milk Coffee Sugar	•	35 Dry 16 Oz 3 " . 4 " . 2 " 1 "	, 8 oz. . 20 "
Peas Bacon Cheese Milk Coffee Sugar	•	35 Dry. . 16 oz. . 3 " . 4 " . 2 "	54 Liquid. , 8 oz.

The ration of the United States army is—
Beef (salt or fresh, with bone) 20 oz. av.
Hard bread . . . 16 "
Peas and beans . . 2.4 "
Rice . . . 1.6 "
Sugar . . . 2.4 "
Potatoes . . . 4.8 "

Besides coffee, tea, salt, pepper, etc.

From the above data we may infer that two quarts of milk and twelve ounces of bread would afford a barely sufficient supply of nutritive material for the full performance of all the functions of a man in health.

This would contain—

Casein					$4\frac{3}{4}$	ounces.
Butter					$2\frac{1}{2}$	"
Salts				•	$\frac{2}{5}$	**
Milk-su					2	**
Starch	07 111	ten	etc		12	5.5

Of this the butter would have a higher nutritive value than apparently shown; so that this dietary might be estimated, for comparison, at twenty-six ounces. And I find in practice that the nutrition of patients is fairly maintained, in many instances, by this amount. It ought, however, to be regarded rather as the minimum amount of food required by a healthy

individual than as an abundant supply, such as would provide for some accumulation of reserve force and nutritive material. adipose tissue, etc., against sudden emergencies or excessive demands on strength and endurance. For this, three quarts of milk and twelve ounces of bread would be ample in health; but when wasting disease makes an extra demand on the system, or excessive secretions are drawing away the blood of the patient, or exhausting discharges are rapidly diminishing his forces, the quantity demanded and, I may add, readily absorbed and assimilated is far beyond this. Thus, in diabetes from six to eight quarts will be taken with apparent ease in many cases, while four to five quarts may frequently be prescribed with advantage in cases of anæmia following acute diseases or exhaustion from profuse discharges, hemorrhage, suppurative processes, etc. And many cases of obscure nature which baffle our powers of diagnosis-which can scarcely be ranked under the head of dyspepsia, hydra-headed as that destroyer of the peace of mind and comfort of individuals is-will yield readily to a pure diet of milk strenuously insisted on and rigidly and faithfully carried out. Especially is a milk diet of benefit in the treatment of fevers, in all stages of which it will be more easily tolerated than any other form of nourishment, and may be given freely, either entire, skimmed or diluted, and sweetened, as may be most agreeable to the patient. We should, however, be careful here not to administer too large quantities at one time, as some gastric oppression might result; a coagulum might be formed which the enfeebled digestive powers might not be able to dispose of. The addition of lime-water or the simultaneous administration of pepsin will obviate this. In inflammatory disease also, particularly after the first acute symptoms are subsiding, I hardly know how we could feed our patients without articles the main nutritive value of which depends upon the milk which they are prepared with. Its usefulness, also, in diseases of the skin and kidneys may be inferred from the consideration of its constitution and mode of its absorption and action in the economy, which may well be compared with that of the so-called alteratives, or with that of mineral waters, with reference to the large quantity of slightly saline liquid taken into and discharged from the system.

When taken into the stomach in proper quantity, milk is almost immediately coagulated by the gastric juice, and the casein converted, in the space of one to three hours, into a peptone, which is absorbed completely in the upper part of the alimentary canal. So are all the other ingredients; there is nothing left to be propelled along the lower part of the small intestines, as is the case when food containing woody fibre, cellulose, bran, etc.. is employed. This gives rise to apparent (not real) constipation; and patients will tell you that milk always constipates them because they find the alvine discharges lessened in quantity and frequency. The bowels miss the scratching from the undigested remnants of food to which they have become accustomed to respond, and the fecal discharges consist only of the altered results of hepatic and intestinal secretions. But a glance at the tongue will usually enable us to decide if these are really deficient. If the tongue is dry and its fur brownish, an aperient will be demanded; but it will usually be found moist and covered with a light, easilydetached, whitish fur, and a little patience only is required. A careful examination of the abdomen — a process, by the way, too often omitted or hastily and carelessly performed-will detect any accumulation which may occur in the alimentary canal. to be remedied according to its location. But the large quantity of liquid taken renders the action of the skin, and especially of the kidneys, much greater than usual. This is accompanied by a depurative action upon the blood which can hardly be equalled by any other means, as fresh nutriment is being brought in at the same time that effete matters are being removed; and I feel that this alterative action of a milk diet deserves more attention than it has hitherto received. From the foregoing we may readily infer the conditions in which milk diet is likely to be useful, and I will not detain you with specific details of cases many of which have doubtless come under the care of each of us. When we have determined that a milk diet is indicated, we should take care, in its administration, not to give too large a quantity at one time, but rather let the intervals be short; and attention should be paid, as I have said above, to the secretory power of the stomach. If this be deficient or doubtful, the simultaneous administration of a

small quantity of pepsin with dilute hydrochloric acid will insure digestion. Limewater may be added if there is a tendency to vomit, or a bitter infusion given if there is want of tone in the stomach. better to pay no attention, as a general rule, to the statements of patients (in cases deemed otherwise appropriate), that they "never could bear milk;" they "detest it;" "it never agreed," etc., etc. If the sameness of the diet be objected to, variety may be obtained by giving it sometimes cold, sometimes hot (with a little salt added), or flavored with vanilla or with a little brandy. A few days will generally put an end to complaints; and even nervous dyspeptics will find such comfort and such allaying of all feeling of hunger that they will contentedly sit at table sipping their milk (by the way, it should always be taken thus, not gulped down) while dainties of all sorts are being consumed around them. Firmness on the part of the physician-who should insist on a rigid compliance with the diet prescribed, and that it should be taken as medicine if it be never so distasteful—will often be followed by the most gratifying results, and most surprising ones to the patients and their friends.

As to the quantity required in infancy and youth, it must evidently be greater proportionately to meet the necessities of growth and development than that required merely to maintain the balance of nutrition and excretion in the adult. very definite rule can be laid down, but I believe we may assume a quart of milk daily as being amply sufficient for a child of I year old, two quarts for a child of 5 to 10, and three quarts for one of 10 to 15 years.

I come now to another and most important branch of the subject, -that of the actual milk-supply of this city. I have been kindly furnished, by the officials of the following railroads, with statistics of the amount of milk delivered by them at their depots during the year 1878.

	Gallons.
Pennsylvania R.R., West Phil ida.	1,243,905
" Kens ngton .	78,830
North Pennsylvania R.R.	2,962,849
West Chester and Philada. R.R.	574,125
Philadelphia and Reading R.R	3,920,302
Philada., Wilm. and Balt. R.R	1,638,770
United R.R. of New Jersey	578,160
West Jersey R.R.	0.0

. 11,305,741 Amount brought forward . To this must be added the amount brought in from farms in the neighborhood of the city, or vielded by cows kept in the city itself, calculated as explained hereafter .

2,370,625

. 13,676,366 Making a total of

Or a daily average of 149,889 quarts. Estimating the population at eight hundred and fifty thousand, this would give a daily supply of 0.176 of a quart = 5.6 ounces or 1/3 of a pint for each man, woman, and child in the city.

Edward Smith ("Foods," p. 318) gives the average daily consumption of milk in

England at 41 ounces daily. Wales, 12 Scotland, 18 44 Ireland, 19

Or from one-quarter to one pint daily.

As to the quality of this supply, there is great difficulty in estimating how far it is what it ought to be. In the first place, the secretion of the animals will depend largely upon the food given to them. We have had the effects of swill-feeding told us repeatedly, and I think rather exaggerated so far as we are concerned in this city. It is with the milk-producer a question of profit; and experience has demonstrated to the better class of farmers that the thin blue stuff which may be drawn from a cow fed upon grains from which the farinaceous constituents have been largely removed in the malting process will not stand in competition with the milk produced from good food, while the deteriorated condition of his stock entails the necessity of constant fresh purchases of cows, and a loss in consequence. It is only in the semi-rural districts, within easy hauling-distance of the distilleries, that this evil practice prevails, and, as our supply is mainly and increasingly drawn from the country beyond, it becomes of less and less importance. But here is just where another evil makes its appearance. The farmer at a distance of more than five miles from the city cannot afford to retail the product of his farm, and must consign his milk to a middleman, who delivers it to the customer, or, in many cases, sells to hucksters or small store-keepers, who retail it. In passing thus through two or three hands, necessarily with the lapse of more or less time, the milk undergoes much change. Not only may water be added, but the cream

is abstracted, and the consequence is that city milk is a very different thing from that which we taste at a spring-house in the country. Sharp competition, too, brings prices down below the point of honest profit; and then temptation comes to the farmer also to dilute the milk or to rob it of part of its cream,-to him as to the consumer the most valuable part. would be far from charging the whole milk-producing and distributing interests with fraud. There are as honorable and high-toned men engaged in both as are to be found in the community, - men as anxious to prevent fraud and to punish it when detected as could be desired. It is the interest of these men to free themselves of the petty rascals who disgrace their business and furnish to the children of the city such miserable trash as must necessarily starve many of them to death. I find words wanting to express what seems to me the fiendish cruelty which mocks infancy with such semblance of food. But it is better to try to remedy an evil if possible than simply to denounce it, though this is also our duty; and it is for this purpose that I have brought the subject before you to-night.

As the business is now generally conducted, the morning's milk is exposed in pans to cool, and in the evening part of the cream is removed; this skimmed milk is mingled with the evening's milk, and is shipped to the city next morning as whole milk. Such practice, I am sorry to say, is regarded as right by many farmers, who justify themselves on the plea of uses of the trade. Others send the previous evening's milk (robbed of part of its cream) with the morning's milk in the morning. A few send whole milk, and command a better price for the article. The middle-man takes the milk from the railroad depot to his own depot; it is now from twelve to twenty-four hours old, but too late for delivery on the day of its arrival. It is again "set," or allowed to stand so that some of the cream may again be abstracted, and delivered the following day. Some is, however, delivered on the day of arrival. The consumer pays from six to ten cents a quart for milk during the winter; from five to eight cents in summer. The wholesale price of milk at the railroad depots is five cents a quart in winter; three cents in summer. If we allow the average yield of a cow to be even ten quarts daily, the farmer could then receive only from thirty to fifty cents a day for each cow. But this is more than the actual yield; and I am satisfied, from observation at my own farm, that it does not pay the farmer to sell milk at less than five cents a quart in winter or four cents in summer.

The business of the middle-man is a risky one. The loss from bad condition of milk, hot or murky weather, bad debts, loss in retailing, etc., is so great that he may fairly demand a considerable margin of profit; and it needs constant care, watchfulness, and personal oversight.

I wish to call your attention to an experiment which I have been trying now for nearly a year with such results that I would ask your co-operation to secure a general adoption of the plan. It essentially consists in having the milk sent direct from the farm to the city in quart jars sealed at the farm. The chances of fraud are thus reduced to a minimum, and the consumer has some one person upon whom he can visit the blame if the article supplied is unsatisfactory. At my farm the milk when drawn from the cow is immediately cooled and placed in quart jars such as are used for preserving fruit; each jar is then closed and sealed with a label bearing the name of the farm. Twenty of these jars are placed in a box and shipped per railroad to the middle-man, who has then only to receive them, deliver to the customer, and collect the empty jars to be returned the next day. This entails upon the farmer much additional labor in careful cleansing of the jars and in putting up the milk in good condition, as also some loss from breakage, etc., which may be estimated at one cent a quart. This has been called the Connecticut plan, I am told, and has been tried there by Mr. Ratchford Starr, at his celebrated Echo farm; but I believe I am the first one to have tested it in our latitude. A special jar has been devised and patented for the purpose by Mr. J. H. Lester, who has kindly consented to be present this evening, and will tell you what he considers its special merits, what he has done in Brooklyn, and proposes to do here. I wish him every success, believing that to insure an abundant supply of healthy food at reasonable cost is one of the best means of benefiting the toiling masses among whom our lot is cast.

The jar I have used with entire satisfac-

tion to myself and my customers is the Cohansev Fruit-Iar.

One word more I would wish to add with reference to the different quality of milk yielded by the different breeds of cows. That from the Jersey or Alderney contains a pound of butter in twelve quarts: from the Devon, in fourteen quarts; that from the Durham, in seventeen to eighteen quarts, - according to Flint; while the grade cow yields milk containing one pound of butter in sixteen quarts. the Jersey cream rises promptly and completely, leaving a watery-blue skim-milk not having high nutritive value. The Durham milk is watery at the outset. The Devon milk is the best, in my opinion, for family use, being rich in butter and casein, and parting with its cream more slowly than other sorts; hence, when skimmed, after twelve hours' standing it is still rich enough for ordinary purposes. The Ayrshire is probably the next best.

# A CASE OF TYPHLITIS.

BY R. F. HERDOCIA, M.D.,

Resident Physician to St. Mary's Hospital, Philadelphia.

JOSEPH S., æt. 22, German, single, a harness-maker by occupation, was admitted into St. Mary's Hospital, service of Dr. Grove, April 21, 1879, when his condition was noted as follows. His bowels are habitually costive, and have not been moved for three days. He has had pain over the right side of the abdomen since yesterday evening, and complains of general malaise. On examining the abdomen, there is a fulness over the right iliac fossa, and palpation detects a hard, prominent swelling, which is painful and exquisitely tender on pressure, the skin over it being slightly reddened. The swelling is on a line with the groin, situated just above Poupart's ligament, and extends half an inch from the anterior iliac spine about three inches towards the pubes, its transverse diameter being two and one-half inches; it is cylindrical. He is obliged to keep his right thigh and leg flexed, for the extended position gives him pain and There is no pain nor tenderdiscomfort. ness over any other portion of the abdomen. He states that he had a similar trouble a year ago. Evening temperature 101.5° F.; pulse 90; respirations 20. The following treatment was ordered:

R Lig. ammon. acetat., Liq. pot. citrat., āā f3ii; Tr. aconiti rad., gtt. x; Syr. et aq., āā f3ss.-M.

Sig.—Tablespoonful every three hours.

Gave also a hypodermic of morphiæ sulph. gr. 1/4, and ordered the following enema:

R Olei ricini, f3i: Olei terebinth., f3ss; Pulv. acaciæ, 3ss; Aquæ ferv., Oii;

which had the effect of bringing away a large quantity of liquid fæces, together with some hard concretions. The tender spot was painted over with tincture of jodine twice daily, and hot poultices applied three times a day.

22d. — Morning temperature 100.5°; pulse 112; respirations 20; pain and tenderness unabated. Ordered, in addition

to previous solution,

R Pulv. opii, gr. vi; Hydrarg. chlor. mitis, gr. xviii; Pulv. ipecac., gr. i. M. ft. pil. no. xviii, Sig.—One every two hours.

Hypodermic of morphia discontinued. Evening temperature 102°; respirations 22: pulse 116. Had a large, thin passage

from the bowels.

23d.—Morning temperature 99°; pulse 112; respirations 20. Had much pain only when he moved; swelling just as tender; there was slight tympanites. treatment continued. Evening temperature 100.5°; pulse 112; respirations 20.
24th. — Morning temperature 99.5°;

pulse 104; respirations 16. There was less tenderness over the iliac fossa. Fevermixture discontinued, and, the skin over the seat of inflammation being sore and blistered, the iodine paint was stopped. Evening temperature 99.6°; pulse 96; respirations 20.

25th. - Morning temperature 98.4°; pulse 88; respirations 20. Felt better. There was slight tenderness. The gums being now touched by the mercury, the calomel and the ipecacuanha were suspended, and half-grain opium pills were directed every two hours. Evening temperature 99°; pulse 84; respirations 16. Poultices discontinued.

26th.—Morning temperature 99°; pulse 100; respirations 20. Patient looked very bright, and could bear a great deal of press-

ure without suffering much pain; had a loose discharge from the bowels. Pills continued. Evening temperature 99°; pulse 88; respirations 20.

27th. - Morning temperature 98.4°; pulse 88; respirations 20. Had no pain over iliac fossa, and very little tenderness; swelling less marked; hardness about the same. Evening temperature 101.5°; pulse 104; respirations 22; tongue coated, and he was restless and felt very uncomfortable. Got out of bed in the morning without permission.

His diet had consisted, at first, of milk and beef-tea, but later, to the present date, he was allowed, in addition, bread-toast and butter. His lungs were carefully examined, and pneumonia of the right lung, in its incipiency, was diagnosticated.

Ordered the following:

R Syr. senegæ, Syr. scillæ, āā f3iii; Pot. citrat., 3iii; Syr. ipecac., f3ss; Tr. verat. viridis, gtt. 1; Syr. simp., f3ss; Aquæ q. s. ad f3iii.-M. Sig.—Teaspoonful every two hours.

It is worthy of notice that with this exacerbation there was but a very slight increase of tenderness over the right iliac fossa, which had entirely disappeared by the next day. Opium pills continued.

28th. - Morning temperature 102.8°; pulse 112; respirations 20. Bowels moved twice through the night. Same treatment continued. Evening temperature 103.4°; pulse 116; respirations 24. Vomited occasionally; swelling gradually reducing in size. Ordered a steam bath; fever-mixture continued.

20th.—Morning temperature 103°; pulse 104; respirations 24. Diarrhœa obstinate. Fever-mixture continued; opium pills and expectorant mixture suspended. Ordered quiniæ sulph. gr. ii four times a day, and opiates and astringents for his bowels. Evening temperature 103.6°; pulse 112; respirations 24. Bowels decidedly better. Steam bath repeated.

30th. — Morning temperature 103°; pulse 104; respirations 24. Same treatment pursued. Evening temperature 103.8°; pulse 116; respirations 24. Ordered another steam bath, for in every instance it had made the patient perspire freely and feel more comfortable afterwards.

August 1.—Morning temperature 102.4°; pulse 104; respirations 24. Felt very much improved. Same plan of treatment continued. Evening temperature 100.4°; pulse 104; respirations 20.

August 2.—Morning temperature 100°; pulse 108; respirations 20. Lung doing remarkably well. All therapeutic treatment suspended, except the quinine. Milk-punches given in addition to his previous diet. Evening temperature 99°;

pulse 104; respirations 20.

From this time he went on improving rapidly. The pain, tenderness, and fulness completely disappeared from the right iliac fossa; the hardness rapidly subsided; the lung cleared up entirely; and he left the hospital, well, May 19, 1879.

## NERVOUS INHERITED SYPHILIS.

BY R. B. GLASGOW, M.D.

L., æt. 11 years, had, for six months previous to coming under treatment, headache, loss of memory for recent events, sick stomach, and spasmodic seizures, which began while patient was convalescent from a slight illness, pronounced scarlet fever, accompanied with very marked alopecia. These attacks occurred at irregular intervals of one or two days, and lasted from five minutes to half an hour, and increased in both frequency and severity up to time of commencing treatment. The seizures did not occur during sleep, were aggravated by excitement, and were preceded by no aura. During the attacks patient fell unconscious, and had twitching of muscles of face and extremities. The attacks were not accompanied by involuntary evacuations, or followed by any of those symptoms known to follow epileptic seizures.

Family history of patient good. Patient had measles and scarlet fever, as above described. Treatment for the seizures and slight anæmia, bromide of potassium and iron. Result of one month of this treatment, seizures less frequent, but more severe. The patient was now put on iodide of potassium, ten grains twice daily. During the first month of this treatment the seizures became much lessened in frequency and severity, and the headache and loss of memory began to disappear. The treatment was continued, and during the second month of it the seizures and other symptoms disappeared entirely, and have not returned to date, now six months since. the known effect of the drug administered, and from the well-marked existence of Hutchinson's serrations on the central upper incisor teeth, the case seems one of inherited syphilis.

## TRANSLATIONS.

Aphasia in Anæmic Conditions.—Dr. Robert Koch describes a form of aphasia which is not dependent upon lesion of the brain, but is of a transitory nature and without sequelæ. It occurs in anæmia, and is immediately dependent upon cerebral hyperæmia. In these cases there is no thickness of the tongue or clouding of the intellect, as in drunkenness, nor is the condition such as in the stuttering of fright or embarrassment, which consists in a failure to articulate. The aphasia described by Dr. Koch is, he says, quite different.

The following case is illustrative. Dr. N., 36 years of age, stuttered as a child, suffered from neuralgia. He was pale and irritable. One day, during a fit of anger, he experienced slight dizziness, tingling about the mouth and in the fingers, and at the same time noticed a difficulty in saving certain words. His tongue was readily movable; his mind clear. The condition continued for a quarter of an hour, startling and annoying the patient considerably. At the end of that time he lay down quietly, and half an hour later could speak quite well. No further attack occurred for several months, when the patient began to suffer from the recurrence of the trouble. A sojourn at the Engadine iron springs relieved him, and he slowly recovered. The attacks always began in the same way, with tingling in some of the fingers of the right hand, dizziness, numbness about the mouth. etc. - Berliner Klin. Wochens., 1879. No. 8.

TUBERCULOSIS OF THE CERVIX UTERI.— At a recent meeting of the Société Méd. des Hôpitaux, Cornil described the case of a phthisical woman who presented a localized abdominal tumor in the deeper portion of the pelvic cavity, with uterine pains and fluor albus. The speculum showed a superficial erosion on the cervix. near the meatus. This erosion or ulcer was half a centimetre (one-sixth of an inch) in diameter, with sharply-cut edges and a vellow base. It was touched with diluted tincture of iodine. Cicatrization was rapid, and three weeks later the patient left the hospital almost completely cured. At the time of examination a small uleer was perceived in the frænum linguæ, which had begun in yellowish tubercular granulations, and which became

rapidly healed over. At the autopsy of this patient, generalized miliary tuberculosis in all parts of the system was found. This form of tuberculosis is very rare, only two or three cases being recorded.—

La France Médicale, 1879, p. 244.

PERSISTENTLY PATULOUS URACHUS; Es-CAPE OF URINE FROM THE NAVEL. - Guéniot gives the case of a man of 79, who had been troubled for some time with dribbling of urine, connected with prostatic hypertrophy. After this condition had lasted some little time, urine began to dribble from the navel. Some time later the patient died, when, in addition to marked hypertrophy of the prostate, the ureters were extremely dilated, the calyces and pelvis of the kidney were filled with urine, the urachus tubular and not obliterated at any point. The lower part was of a dark color, the sub-mucous tissue tumefied, and the epithelium in part destroyed. Looked at from the interior of the bladder, the opening of the urachus presented a lumen of 1 to 1.5 mm. diameter, and was circumscribed by a raised border. Guéniot alludes to a former case reported by himself, and gives references (incomplete) to twenty-one other cases. - Bull. Gén. de Thérap., 1879, p. 269.

DIAPHRAGMATIC RUPTURE.—Dr. Bremme publishes a case of rupture of the diaphragm, on the right side, due to violent and rapid distention of the stomach with The patient, after having eaten a meal of potatoes and coffee, took some carbonate of soda to allay a slight heaviness that he felt: the pains increasing, he took some more of the salt of soda; the pains became agonizing, and three hours after ingestion of the meal the patient died. On post-mortem examination a laceration was discovered on the right side of the diaphragm, opposite its attachment to the sixth rib, through which a coil of the small intestine had passed. A medicolegal inquiry failed to detect the presence of poison, and attributed the distention to carbonic acid gas .- Riv. Sper. di Fren. e di Med. Legale (published in the Giorn. Internat. delle Scienze Med., 1879). G.

TREATMENT OF WHITE SWELLING.—
M. Suchard describes Mayor's procedure as follows: it is peculiarly adapted to those cases of subacute arthritis with more or less abundant suppuration which do not readily support the ordinary bathing and bandaging. It consists in enveloping the

diseased articulation in a wrapping of lint or charpie saturated with a mixture of cerate and mercurial ointment. Imbricated straps of adhesive plaster fix this first dressing, which themselves are covered by leather splints covered with soap. By this means absolute immobility is gained, together with perfect elastic compression, as well as the peculiar medicinal effect of the mercury, by means of which suppuration diminishes rapidly, and a favorable result is gained. —Le Progrès Médicale, 1879, p. 307.

CONTRIBUTION TO THE DIAGNOSIS OF UTERINE CARCINOMA. - P. Muller says that, while the usual origin from which carcinoma reaches the body of the uterus is the vaginal portion, cases in which the carcinoma begins directly in the uterine body are very rare. He has seen five such cases. Two forms are to be distinguished, the general infiltrating and the tuberculated. The first of these may be mistaken for sarcoma, the latter for fibroid. amination of the growths (carcinoma is at first harder) and inquiry with regard to the age (the other forms usually occur after the menopause, while fibroid occurs before) help to settle the differential diagnosis. The symptoms are pain (not always), bleeding, reddish discharge; later, suppuration, penetration into the abdominal cavity, adhesion. The best treatment is total extirpation by Freund's method. - Cbl. f. Chir., 1879, p. 271; from Correspondenzbl. für Schweizer Aerzte.

CYST OF THE NECK WITH OILY CONTENTS.—Malherbe found, in the case of a woman of 25 to 30 years of age, a tumor the size of a large nut on the angle of the right jaw. This had been observed ever since the patient was 5 years old. It had grown slowly and painlessly from the first. This tumor was seated deeply under the fasciæ of the neck, sharply defined, hardly showing under the skin, and showed marked fluctuations. Puncture gave exit to an oily fluid. A year later the cyst became again filled. It was emptied this time with the aid of a hypodermic syringe, and a few drops of absolute alcohol were injected, which resulted in a cure.—Bull. de la Soc. de Chir., vol. iv. No. 4.

FRACTURE OF STERNUM.—Dr. Montané reports a case of transverse fracture of the sternum presenting displacement of the upper fragment forwards.—Gaceta Med., Havana, Nov. 1878.

STRANGULATED HERNIA.—Prof. Frusci, of the University of Naples, publishes a case of congenital inguinal hernia, brought to him on the forty-sixth day of the child's life, when he found the hernia strangulated. Herniotomy was performed on the same day, and on the ninth day the child died from erysipelas. After a lengthy consideration of the subject, the writer arrives at the following conclusions:

1st. In such cases it is not advisable to temporize, but to proceed immediately to herniotomy, if the constriction does not

yield to rational means.

2d. Not to open the sac if sure that the constriction lies in the fibrous ring and the intestine is in good condition, but to cut the constriction outside the sac.

3d. To try to secure union by the first intention, as a general rule.—Giornale Internat. delle Scienze Mediche, Napoli, 1879. G.

INJECTION OF TINCT. IODINI IN ASCITES. -Naranjo, in a case of ascites where no disease of heart, liver, or kidneys could be made out, the duration of the disease being six years, drew off the fluid, and injected a mixture of two ounces of tinct. iodini and four ounces of water. This was allowed to remain in the abdominal cavity for two minutes, various movements being made so that the tincture should reach all parts. Slight fever was observed during the next few days; the abdomen was painful and slightly prominent. Eight days later the patient was about again, and at the end of a year a radical cure was noted. second, somewhat similar, case, in which one part tinct. iodini, two parts water, and two parts white wine were injected, after the withdrawal of ten gallons of fluid peritonitis followed, but this was relieved in about a week. Eighteen years after the operation the patient remained quite well. In a third case, death followed; but here there was disease of some of the abdominal organs. Naranjo concludes the operation a good one in "essential ascites," that is, when no disease of the heart, liver, or kidneys exists.—Centralb. f. Chir., 1879, p. 286; from El Genio Medico-quirurgico.

ON THE USE OF SALICYLIC ACID.—Salicylic acid, says Dr. William Squire, has two independent effects, the germicide and the antipyretic, and in some diseases, as scarlatina, both of these come into play. Half an ounce of glycerin when hot will dissolve half a drachm of the acid. This is stronger than necessary, and, when cold,

will either deposit some of the acid or may become solid; in either case it will redissolve when heated, and can be mixed in a warm spoon with an equal quantity of hot water, and given in small quantities, with or without any drink afterwards; or a solution of five grains of salicylic acid to the drachm of glycerin can be used, either alone or given with a little cream. this way not only are the mouth and throat cleansed, but the fever is soon lessened; it is only while the fever is high that the strong doses need be continued. Half an ounce of the glycerin in half a pint of water forms a suitable mixture; this, sipped frequently, or given as a drink every two or three hours, diminishes fever and improves the throat. Such a solution of two grains to the ounce is efficient as an antiseptic, and can'be used in spray. When a general antipyretic effect is desired, salicylate of soda may be given at the same time, fifteen grains being equivalent for this purpose to ten grains of the acid. is contraindicated where there is renal congestion or any albuminuria, as most of the acid is secreted by the kidneys.—Brit. Med. Four., v. i., 1879, p. 625.

THE PREPARATIONS OF COTO IN DIAR-RHEA.—Coto and its derivatives have already reached or probably soon will reach the markets of this country, and it may be well to note the high terms in which it is spoken of by those who have employed it. Fronmüller and Baeltz assert its value in the most rebellious diarrhœas (especially those of a tubercular character) and in the colliquative sweats of phthisis. It has the great advantage over other medicaments employed in these affections that it stimulates the appetite. The tincture is to be made, with great care, from one part of the bark and nine parts of alcohol (58°). The dose varies from ten drops daily to an ounce, according to the effect. may be substituted; two grains of this equal eighty minims of the tincture. -Bull. Gén.

de Thérap., 1879, No. 8.

EXTIRPATION OF HARD CHANCRES.—Pospelow, following Auspitz's example, cut out three undoubted hard chancres in as many individuals. In two of these cases no secondary symptoms occurred within six months. In the third, however, where the chancre had lasted several weeks before extirpation, constitutional symptoms showed themselves.—Cbl. f. Chirurgie, 1879, p. 320; from Moscow Med. Gaz.

BORATED COTTON AND BORO-CARBO-LATED DRESSINGS.—Solger uses hot solutions of boracic acid, dipping tampons in ten per cent. solution of the acid and applying them to wounds. On cooling, the boracic acid separates in crystals and the dressing clings closely to the skin, an advantage in the treatment of ulcers. rated cotton absorbs the fluids of ulcers. Under the name of boro-carbolated dressing is understood that made of solutions of boracic acid and carbolic acid. combination is an admirable antiseptic, and much more effective than carbolated cotton alone. - Cbl. f. Chirurgie, No. 12, 1879; from Berlin. Klin. Wochens.

INFLUENCE OF THE OPERATION FOR PHIMOSIS ON IMPOTENCY IN THE MALE. — Dudukalow operated on four cases where excessive sensitiveness of the glans caused impotency. He succeeded in curing this completely in three cases within six to ten months, and partly in the fourth. He warmly recommends the operation, not as a means of cure alone, but also as a diagnostic aid in obscure cases, when no other cause of impotency than an elongated prepuce exists. — Cbl. f. Chirurgie, 1879, p.

302; from a Russian source.

Retrogressive Changes in Vascular Tumors.—E. Pawloff states that microscopic examination of a mixed angeioma, removed from the frontal region in a patient 16 years of age, showed a retrogressive process dependent upon a development of the endothelium in the form of certain endothelial cylinders; in some fields the gradual growth of the endothelium and the formation of cylinders were illustrated.—Coll. f. Chir., 1879, p. 237.

Lung Troubles on the Affected Side in Hemiplegia.—Rosenbach has observed that pneumonia, broncho-pneumonia, and pleuritis in hemiplegics usually occur on the affected side, and he attributes this to the defective reflex activity of the lung due to paralysis, which allows fragments of food, etc., to be inhaled without exciting coughing.—Cbl. f. Med., 1879, No. 16; from

Berlin. Klin. Wochens.

Belladonna in Collapse.—R. Weber has given extract of belladonna in three cases of profound collapse, with favorable effect within a few hours. He urges its further trial. The dose was a quarter of a grain.—Cbl. f. Med.; from Berlin. Klin. Wochens., 1878, No. 27.

TREATMENT OF ACUTE BLENNORRHAGIC EPIDIDYMITIS.—Dr. Duy, in his thesis on this subject, after reviewing the various means in use for the treatment of this affection, expresses himself in favor of Langlebert's impermeable raw-cotton suspensory as modified by Heraud. This dressing fulfils the three following indications: it keeps the parts immovable; it compresses them; and it is conducive to free sudation. In addition, it has been used with marked success in the Hôpital de l'Antiquaille, at Lyons, for the past two years.

TREATMENT OF VARICOCELE BY ELECTROLYSIS.—Percepied (Thèse de Paris, Le Progrès Méd., 1879, p. 208) proposes the following plan. A hypodermic syringeneedle is introduced into one of the veins connected with the knot of enlarged vessels, or at least in the immediate neighborhood. With this is connected the positive electrode, while to the surface of the scrotum is applied the negative electrode, covered with chamois. A few sittings suffice for the cure of the varicocele. Only three cases are cited, too few for a positive opinion; but the operation seems worth a

trial.

Periostitis in Typhoid Fever — Mercier notes the occurrence of periostitis as a complication of typhoid fever in the earlier stages of convalescence. Periostitis usually occurs in the multiple form, and in the lower extremities. Injuries even of the most trifling character may give rise to this form of periostitis. In seven cases observed by Mercier, necrosis never occurred. — Col. f. Chir., 1879, p. 237.

Successful Ligature of Left Common Carotid for Aneurism.—The Gaceta Medica (Havana) for March, 1879, reports a case of communicating aneurism of internal carotid and cavernous sinus, of traumatic origin, and attended with exophthalmia, thrill, pulsation, and murmur, successfully treated by ligature of left common carotid, which operation was performed by Dr. Hartmann in March, 1878.

OVARIOTOMY. — Ovariotomy was performed for the first time in Peru on June 12, 1878, by Dr. Lino Alarco, with successful result. — Revista Med. de Chile, Jan. 15, 1879.

HAY FEVER is checked by dropping a solution of salicylic acid, of the strength of one grain to the ounce, into the nares.

# PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, JUNE 21, 1879.

## EDITORIAL.

## WANTED-A CRITIC!

A MONG the recollections of our college days was that of a "warfare of science" between two celebrated mineralogists, carried on month by month and year by year in one of the scientific journals. to the edification and amusement of all readers. Prof. S., of Amherst, was sanguine and enthusiastic; Prof. B., of Yale, cold, cautious, and exact. Prof. S. was always announcing the discovery of some wonderful new mineral; Prof. B. invariably followed him up, in the next number of the "journal," with a demonstration of the fact that the wonderful new mineral was only an old and well-known rock mixed with dirt. And so the constructive and disintegrating forces kept up their work, and, for aught we know, continue to this day, to the great advantage of mineralogy.

Since engaging in the study of medicine we have, time and again, longed for some critical Prof. B., to follow up the enthusiastic and voluminous writers who are always revamping forgotten operations, inventing new pieces of apparatus, or recommending new and astonishing elixirs, tinctures, fluid extracts of goodness-knowswhat, for the cure of all known complaints. The proportion of rubbish in our medical journals, even of the better class, is portentous: fortunately, but little of it is read. But, once some new treatment is started, or some new theory broached (and no matter what the reputation or want of reputation of the writer), the paste-pot and scissors transfer the cream of his article from journal to journal; it is translated into two or three foreign lan-

guages, and perhaps (as we have known) even translated back again to the original And thus the vapid and useless thoughts of some tyro or ignoramus are given currency the world over. We have in mind now a certain professor, of whom it was said, years ago, that there was only one original idea in his lectures: this was his famous treatment for - say bronchitis. "Syrup of onions in bronchitis" was this learned professor's strong point; he devoted a whole lecture to it every year. Years passed; we had forgotten the professor and his treatment until last year, when, to our astonishment, we saw an announcement of his name among the speakers at a well-known society. Wondering what he could have to say, we looked farther, and found him announced to read a paper on "Syrup of Onions in Bronchitis." A little later an article appeared in a prominent journal, by the same individual, on the same subject; later the "Transactions of the Pulmonic Association" were published, and chief in the table of contents was a paper, by Prof. X., on "Syrup of Onions in Bronchitis"! Since then we rarely open a medical journal without seeing the professor and his article in some shape or other.

We may add that the treatment alluded to is not new, and was well known long before the professor took it up and made it his own. It was to be found in elementary text-books years before the professor reinvented it.

Now, can't this thing be stopped? We all deplore the avalanche of medical literature which covers the country. Possibly, if every man who wrote an article for the medical journals knew that a critic would be on his track in the next number, ruthlessly to expose his errors, show up his ignorance, and demonstrate the falsity of his pretensions to originality, there would be less written; but it would be more valuable. Our distinguished colleague of the

Index Medicus might check some of this overflow of superfluous writing at the fountain-head. If, as he jots down the titles of the various papers coming under his notice, some ingenious mechanism could print the mental comments "bosh," "twaddle," "trash," etc., opposite the lucubrations above alluded to, how great the relief to afflicted humanity! how vast the saving of private vexation of spirit! But that is too much to expect of any one man; and we can only reiterate, on the part of all readers of medical journals, Wanted—a critic!

## LEADING ARTICLES.

THE USE OF THE FORCEPS AND ITS ALTERNATIVES IN LINGER-ING LABOR.

THE recent debate on this subject in the London Obstetrical Society presents many points of interest, not only because the question is one of instant and practical importance, but also on account of the eminent gentlemen who took part in the discussion.

The opening address was by Dr. Robert Barnes, who began by some general remarks upon the diversity of practice regarding the use of the forceps from the time of its invention until the present day. In England it seems probable that the forceps was more commonly employed during the early period of its use than it was thirty or forty years ago. Now and then its use has become so frequent as to become almost an abuse, and then by a natural reaction it has fallen for a time into abeyance. Thirty years ago the law of Denman was taught, that enjoined us to wait until the child's head had rested for six hours upon the perineum before resorting to the forceps; and this policy of procrastination was scarcely mitigated by the associated rule that "no case was to be esteemed eligible for the forceps unless the ear of the child could be distinctly felt." The influence of this sort of teaching may have been beneficial in repressing reckless and unskilful operators, but, as might have been expected, the neglect of the forceps has entailed the very dangers for which it was denounced: there is more hope for

humanity in the enterprise of the man who acts than in the blind helplessness of the man who does nothing; the first may improve, but there is no hope for the man who is tied hand and foot to the policy of waiting.

The limits of the inquiry to "the use of the forceps or its alternatives in lingering labor" imply the exclusion from our consideration of (1) those cases in which acceleration of labor is indicated by convulsions, by hemorrhage, by other complications, as syncope, dyspnœa, apoplexy; (2) those where the child is in danger from prolapse of the umbilical cord, or other causes independent of protracted labor. The comparison lies between the two opposite practices of free resort to the forceps or its alternatives: (a) simple inaction or expectancy; (b) ergot or other oxytocics; (c) the filet or lever; (d) compression of the uterus, or other manœuvres not instrumental.

What is the state which demands or justifies interference? Collins gives the following as the conditions for using the forceps: "Generally speaking, so long as the pulse remains good, the bowels and bladder act well, the soft parts remain free from severe pressure, and uterine action continues so as to cause the presenting part to descend ever so slowly, the patient having no pain in the abdomen on pressure, or local distress, the child at the same time being alive, as indicated by the stethoscope, I am satisfied no attempt should be made to deliver with instruments, and that he who does so wantonly exposes both mother and child to danger. . . . The necessity alone of freeing our patient from impending or present danger should induce us to resort to instruments,"

With this view Ramsbotham and George Johnson substantially agree. And although their practice with regard to the greater or less frequency of using the forceps was very divergent, yet these eminent men appear to have gained about the same

average result.

In discussing the question, we are met by the necessity of drawing a line between the "high" and "low" forceps operations. The low operation takes simply those cases in which the head has entered the pelvic cavity; the high operation applies to those cases in which the head is seized at or above the brim. The low operation may be accomplished by the short forceps, and is a

simple proceeding; the presence of the head in the pelvis generally implies that there is no obstacle from disproportion to be overcome, that the resistance of the cervix uteri and vagina has been overcome, and that there remains little or nothing beyond the resistance of the vulva. simply want a little vis a tergo to complete expulsion. In this conjuncture some will prefer ergot, some will prefer forceps. Dr. Barnes expresses himself in favor of the latter for these reasons: (1) Hardy and McClintock have shown that unless the child is born within a short time after the action of ergot it is likely to be born dead. (2) The action of ergot upon the uterus is "You have evoked," says Dr. uncertain. Barnes, "a Frankenstein whose brute violence you can neither subdue nor regu-(3) In a large proportion of cases of arrest of the head in the pelvis, the arrest is due to malposition of the head, for example, occipito-posterior positions. In these cases extension tends to take place around the promontory of the sacrum as a centre instead of the symphysis pubis. The driving force is wasted. Fortunately, it often ceases or moderates. It is utterly unscientific, even dangerous, to goad it by ergot. The forceps is the true and effective help. It not only supplies the wanting force, but gives that force its proper direction, under conditions in the highest degree adapted to secure the wellbeing of mother and child.

So much for the use of the forceps when the head is in the pelvis. About this there is not so much question. Most debate is with regard to the "high" operation, and this is performed with the long forceps, the chief advantages of which are in its tractile power, which may be greater than the natural expulsive power, its leverage power, and its compressive power. best forceps will be that which enables the operator to use all these forces in due har-The high operation, the great point upon which the contest turns, must be performed during the first stage of labor, when the child has made little or no progress, and therefore when the cervix uteri is imperfectly expanded. The head has to be sought and seized at or above the pelvic brim. This, of course. demands a long and double curved forceps. There is a greater complication of factors; far more judgment and skill are required in deciding upon and carrying out the

operation. What are the conditions which demand or justify the high operation?

It may at once be admitted that there are cases of lingering labor in the first stage,—that is, before the cervix uteri is fully expanded, and before the child's head has entered the pelvis. One order of such cases is where the uterus is more or less paralyzed, or disordered in its action by excess of liquor amnii. Here the forceps may be used with advantage. Another is when the child is dead. Craniotomy would be proper here, but until we know that the child is dead the forceps is preferable. And monsters commonly cause lingering labors. A third order of cases is when the cervix uteri is imperfectly expanded.

Generally, so long as the head is above the brim of the pelvis the cervix is imperfectly dilated, and hence when we apply the forceps above the brim we usually do so through an imperfectly-dilated cervix. We must recognize this fact, because it is a direct infringement of the old canon, never to use the forceps till the os is fully expanded. What are the cases, under this order of things, which call for the forceps or its alternatives? The first alternative is patience and time; the second, ergot, which Dr. Barnes objects to because the delay at the brim may be due to a slight disproportion, when ergot would be most harmful. There is another order of cases where labor is lingering while the head is at the brim (cases of overhanging belly and uterus), in which the abdominal muscles fail to keep the long axes of the uterus and child in due correlation with the axis of the pelvis. Here the forceps is especially useful, even though the cervix be not fully dilated. The alternative is turning. Both are facilitated by delivery in the dorsal posture, and by compression of the abdomen.

As to what is lingering labor in this connection, it may be remarked that if the signs of lingering labor are manifested while the head is above the brim we are as much called on to interfere as if the same signs were manifested, the head being in the pelvic cavity. Fortunately, the powers of nature are at this time fresh and unjaded, and may be relied upon much more than in the later stage. We may say, then, that the high operation is sometimes called for, but that the necessity for it is not frequent. As to the dangers connected with

the operation itself, these are, first, connected with the difficulty of introducing the forceps itself through the imperfectlydilated cervix. This operation is not without danger even in skilful hands, and should never be attempted by the unskilful. The forceps may, indeed, be introduced without evil results, but when it is locked, and traction is made against a hard unvielding os, the whole uterus and child are dragged down towards the pelvic outlet, and laceration of the cervix, etc., together with various subsequent disasters, may be the result. The dangers, in fact, are very much the same as those entailed by lingering labor, and are much more to be feared in primiparæ. This is the borderland of the use of the forceps, and the various other expedients for overcoming the rigidity of the os uteri, copious warmwater irrigation, the hydrostatic bag, etc., may be employed as alternatives. Finally, craniotomy here is also an alternative, but so dreadful a one that Dr. Barnes urges the freer use of the forceps as far preferable. His conclusions are as follows:

"I. In lingering labor, when the head is in the pelvic cavity, the forceps is better

than its alternatives.

"2. In lingering labor, when the head is engaged in the pelvic brim, and when it is known that the pelvis is well formed, the forceps is better than its alternatives.

"3. In lingering labor, when the head is resting on the pelvic brim, the liquor amnii discharged, and it is known, either by exploring with the hand or by other means, that there is no disproportion, or only a slight degree of disproportion, even although the cervix uteri is not fully dilated, the forceps will generally be better than its alternatives.

"4. In proportion as the head is arrested high in the pelvis, in the brim, or above the brim, the necessity, the utility, and the safety of the forceps become less frequent.

"5. As a corollary from the preceding proposition, increasing caution in determining on the use of the forceps, and greater skill in carrying out the operation, are called for."

The debate which was begun upon Dr. Barnes's address promised to be of a most interesting character, but was not concluded at that session of the Society. In our next issue we propose to give a résumé of the opinions expressed by the various authorities taking part in the discussion.

# PROCEEDINGS OF SOCIETIES.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

A T a conversational meeting, held at the hall of the College of Physicians, Philadelphia, March 12, 1879, President Henry H. Smith, M.D., in the chair, Dr. J. Cheston Morris read a paper on "Cows' Milk as Food in Health and Disease" (see page 446), and presented some specimens of milk of Alderney, Devon, and other cows from his own dairy, the plan recommended being to send hermetically-sealed glass jars directly from the dairy to the consumer's house, thus preventing any adulteration or contamination in transit or before delivery. This plan had been carried on to a large extent in New York, and the introducer of the system into that city, Mr. Lester, was present at his invitation, and would explain to the Society the details of his plan if desired.

The President requested Mr. Lester to describe the method as now in operation in

other cities.

Mr. Lester said that the object of the scheme was to deliver pure milk to consumers in the city each morning in hermeticallysealed cans, which are closed under pressure at the dairy. He exhibited a peculiar glass jar made expressly for the purpose. plan has been in successful operation in New York and Brooklyn for three years, the empty jars being collected each morning when full ones are delivered. The capacity of the jars is one and two quarts. He had noticed that the fact of keeping the milk under pressure had increased the rise of cream, so that a large amount of cream could be seen at the upper part of the fluid when delivered to the customer. This can be skimmed and used separately or mixed again with the milk. had that morning visited a dairy near Philadelphia, with a view to purchasing it and introducing the plan on a large scale in this city. The price would be not much above the ordinary retailing price asked by the middle men. He believed this subject of the supply of pure milk to be of special interest to physicians.

Dr. W. R. Cruice, at the request of several members, spoke of his personal experience with the milk diet. Two years ago he found that he was suffering from albuminuria. Examination of the urine revealed a large proportion of albumen (nearly one-half), with tube-casts, etc. Upon the advice of a medical friend, he resorted to a milk diet, drinking about three quarts per diem; occasionally he would add to it a small piece of bread, but, as a rule, the milk only had been used. This diet had been exclusive for at least seven months. His general condition had now improved so that his weight had increased from one hundred and fifty-five to one hundred and eighty-five pounds. He stated that his

appetite and digestion were good; bowels regular; he had not been troubled with either diarrhœa or constipation; occasionally a little flatulence. He had not acquired any distaste for the milk, and was now able to attend to his daily practice, and never felt better in his life. He drinks milk three times a day, and takes nothing between meals. In reply to a question, he said that his increased weight was not due to dropsy, as he had not had any exdema or effusion into any internal cavities

for a long time.

Dr. Benjamin Lee spoke of the essential importance of a good milk supply as an article of diet in large cities. Milk may change in a few hours from a wholesome food to a poison, from the fact that it possesses the power of absorbing morbific matters in virtue of its fatty character and its highly-vitalized condi-tion. The plan suggested by the lecturer, with the additional improvement of Mr. Lester, has many advantages over our present methods of transportation. There can be no question that the reason why, in very many cases, infants are found to thrive upon condensed milk when they sicken upon fresher milk is that the condensed article escapes the agitation and changes that occur during transportation. Being of greater density, it is less easy to communicate molecular motion to it, and, the can being full, there is no leakage and no absorption. He had already called the attention of the Society to the filthy condition of the milk-cars, whose floors, covered by drippings from the cans, are in a state of putrefaction, as evidenced only too plainly to the sense of smell. The milk is kept overnight in these cars, and with the jolting a portion splashes out and this offensive air takes its place, rendering the milk poisonous. We have here the means of absolutely preventing any such contamination. These two points mentioned are much in favor of the new method.

Dr. Morris, in referring to Dr. Lee's remarks about the condition of the milk-cars, said that he had himself noticed a peculiar odor in the cars, and this explains what he did not understand before, that when sending milk to the city in the twenty-quart cans, if any milk remained in the car overnight it would be sour in the morning, whereas under other circumstances it would keep sweet much longer. In regard to the cost of milk to the dairyman, he was satisfied that the actual cost of good milk is not less than four cents per quart.

Dr. C. B. Nancrede said that he formerly had constant trouble in obtaining a regular supply of good milk for his children until he tried the plan advocated, and he wished to testify to the advantage of this method. The milk he now uses he obtains from the farm of Dr. Morris, in the glass jars shown by the lecturer. The milk is always the same, and keeps in good order and sweet for several days. This plan is much superior to any other that he is aware of.

### REVIEWS AND BOOK NOTICES.

THE ANATOMY OF THE JOINTS OF MAN. By HENRY MORRIS, M.A., M.B. Lond., F.R.C.S., Senior Assistant Surgeon to and Lecturer on Anatomy and Demonstrator of Operative Surgery at the Middlesex Hospital. 8vo, pp. 462. Philadelphia, Lindsay & Blakiston, 1879.

This handsome book is really a valuable contribution to anatomical literature. The descriptions are clear and very accurate, and the style excellent. While confining himself very closely to his subject, the author has yet given sufficient space to certain auxiliary matters, such as the relations and actions of adjacent muscles and of the constituent bones, to give his account of the mere joint-anatomy a force and interest which would otherwise have been wanting. It is a proof of the good judgment with which his work has been done, that he has avoided any reference to the pathology or surgery of the articulations; this would have swelled the volume to such a size as to have greatly impaired its value.

Mr. Morris has not failed to note and to illustrate Hilton's principle as to the common nerve-supply of the muscles, the skin overlying their insertions, and the interior of the joints concerned in their action. He might, perhaps, have referred also to the analogy between the joints in the limbs and the visceral serous membranes with advantage.

We can hardly agree with him in his opening statement, that "it may with truth be said that every kind of structure in and every organ of the body is, to a certain extent, subservient to the perfection and uses of the joints." Surely this is giving an auxiliary the place of a principal. If the statement had been that the perfection and uses of the joints were essential to the proper performance of every other function of the body, it would have been entirely correct.

We regret to see that the name of our countryman Dr. Bigelow is not mentioned in connection with the hip-joint, and that his excellent remarks in regard to it are referred to only with disparagement.

One point in the mechanics of the bursæ we would call attention to. We believe they are sometimes of use in giving advantage to the action of muscles, as, for instance, that small one beneath the ligamentum patellæ, which prevents the direct pull of the extensor muscles in the line of the tibia, and thus adds materially to the effective force of their contraction.

It would have been better if references to the plates had been given in the text. Sometimes the connection between them is wholly obscure. The illustrations themselves are generally good, but the frontispiece is utterly valueless; and the plates copied from Monro (Nos. xxi., xxxvi., xxxvii., and xl.) are extremely inartistic, to say the least of them. They are far inferior, not only in execution but in clearness, to the fine copper-plate

originals.

We have spoken freely of these few defects in the excellent volume before us, because they are such as in a second edition can be readily remedied. It is not often that an author comes before the public (as we believe Mr. Morris now does) for the first time with so very acceptable an offering. Dealing simply with the anatomy of the joints, he has yet produced a book which ought to be in every surgeon's library.

AMERICAN HEALTH PRIMERS. HEARING, AND HOW TO KEEP IT. By CHARLES H. BURNETT, M.D., etc. Philadelphia, Lindsay & Blakiston, 1879.

This little book, although intended ostensibly for the general public, contains very much that will be new and interesting to most medical men. Owing to the lack of opportunity afforded during our hurried courses of medical study, few physicians are well posted in the physiology and pathology of the ear; and to such as desire to gain some knowledge of the subject, Dr. Burnett's primer affords a ready and trustworthy guide. Brief and clear in its descriptive parts, agreeable in style, and characterized by a fine perception of what is due to science and good taste, we may peruse it ourselves with profit, and recommend it to our patients with confidence.

FISTULA, HÆMORRHOIDS, PAINFUL ULCER, STRICTURE, PROLAPSUS, AND OTHER DISEASES OF THE RECTUM; THEIR DIAGNOSIS AND TREATMENT. By WILLIAM ALLINGHAM, F.R.C.S., Surgeon to St. Mark's Hospital for Fistula and other Diseases of the Rectum, etc., etc., etc. Third Edition, partly rewritten. 8vo, pp. 325. Philadelphia, Lindsay & Blakiston, 1879.

The fact that this work has reached a third edition is in itself evidence that it contains material of practical value. The style, however, is bad, and often indicates carelessness, while the want of an index detracts greatly from the convenience of the occasional reader.

Mr. Allingham hardly indicates clearly enough in what class of cases of fistula he would and in what class he would not use the elastic ligature. He gives a wood-cut of a rather complicated instrument for applying it; we have always found very simple means to answer perfectly,—a small eyed probe and fine thread being first passed, and a single slip-knot of the latter tied very close to the end of the rubber cord, which can then be drawn through with great ease.

Our author still continues to condemn the écraseur as a means of removing hæmorrhoids, in which we cannot agree with him. He has found reason to modify his objections

to rapid dilatation of the sphincter in cases of fissure. In the chapter on rectal cancer, he refers at some length to the operation of extirpation, with which he has had some not unfavorable experience. The remarks on the physiology of the colon do not appear to us to have any special significance, or to be based upon very accurate experiments.

We cannot but be surprised that no writers upon the subject of rectal diseases and their treatment seem to be aware of the value of the head-mirror as an aid in exploring and operating upon these parts. Its use often enables us to command the light to great advantage, and to avoid prying eyes in chambers that are overlooked by neighboring windows.

P.

A TREATISE ON GOUT AND RHEUMATISM. By P. HOOD, M.D. Second Edition. Philadelphia, Lindsay & Blakiston, 1879.

Whether it be due to differences of climate or to differences of habits of life, the fact seems indisputable that gout is alien to American shores. We suppose that very few, if any, of our readers have ever seen a case of gout in an American which could not be traced directly to foreign ancestry. The writer of this certainly has never seen such a case. On the other hand, there is probably no one of those who have paid any attention to the medical history of our old Philadelphia families, who has not seen the gradual extinction of the gouty diathesis through successive generations,-the chronically-swollen joints, the chalky concretions, of the imported sire, in the child indicated by occasional attacks of gout; in the next generation by various cardiac and other functional disorders,-by neuralgias and headaches; and in the greatgrandchild only by a tendency to rheumatic disorders.

Gout plays, therefore, a much less important rôle in the life of an American physician than in that of his transatlantic brother. No gouty squire, no irascible nobleman, no Falstaffian alderman, swells his yearly income by a driblet from a plethoric purse. Nevertheless, rheumatism is triumphant yet, and irregular gout is far more common (at least on the Atlantic seaboard) than is believed by many; and the volume of Dr. Hood is of real interest to us on this side of the Atlantic, because it has been written by one who has evidently seen much more of the disease than can ever fall to the lot of an American physician.

The most interesting and important portions of the book are those upon treatment. These are not formal, but are so filled with the true spirit of clinical therapeutics—i.e., the honest, eager intention to cure—that their reading is not only delightful, but very instructive. We trust that the pleasure and profit we have derived from their perusal will be shared by many American physicians.

# GLEANINGS FROM EXCHANGES.

DRUG-SMOKING.—There are several ways in which medicines may be administered into the lungs,—by inhalation with steam, as atomized fluids, by insufflation, by fumigation with powders prepared so as to burn freely in the air, or, lastly, by smoking. The simplest and surest method is, in the opinion of Dr. Thompson, the use of paper soaked in a weak solution of nitre to make it burn continuously, and dipped afterwards in the tinctures or solutions of the drugs to be tested, the paper being rolled into cigarettes of uniform size. In order, however, to disguise the odor of burnt paper, a little tincture of tobacco is used, as in the following formula, which represents the basis for each cigarette:

R Swedish filtering paper, size 4 in. by 2½ in.; Potassæ nitratis, ¼ gr.;

Tinct. tabaci,  $\mathfrak{m}_{x}$ ; Olei anisi,  $\mathfrak{m}_{x}$ .

Tincture of tobacco made with two and a half ounces of the leaf to a pint of spirit.

A solution of any drug can then be prepared, and the paper, having been floated through the solution in a flat dish, when dry can be cut into a certain size, and the dose thus accurately measured. Opium was the first drug experimented with, and one-eighth of a grain of the drug the dose at first tried; but it was soon found that the effects produced by smoking this quantity were too intense, and it was at last discovered that one-sixtyfourth of a grain of the extract of opium was sufficient for an initial dose. Cigarettes with this quantity of opium were smoked by Dr. Thompson and three other healthy men, and in a few minutes a decided effect of dizziness was produced. The cigarettes were smoked in the ordinary way, the smoke being partly rejected; but, if the full effect of the dose be desired, the smoker should be instructed to expand the lungs with full inspiration and retain the smoke in the lungs. In the case of one healthy man the dose was increased to one-thirty-second of a grain of the extract, but this, together with the same dose of stramonium, caused too much and too prolonged dizziness. Dr. Thompson cites several cases in which the smoking of these cigarettes appeared to have been followed by the most satisfactory results. In one case so small a dose as the two-hundredth of a grain of opium procured many hours of sleep, a result which far surpasses that obtained from the subcutaneous injection, a mode of administration "which has hitherto been looked upon as likely to give the most concentrated results."

— Medical Press and Circular; from Practitioner, April, 1879.

A RARE CASE OF CHRONIC COPROSTASIS.— Dr. Flech has published the case of a man of delicate constitution, but well nourished, who had always been subject to constipation. For

two years previous, however, his bowels had become torpid to a most alarming extent, moving only from five to six times a year. In the intervals between these evacuations the patient passed a very small quantity of hard fæces once in six, eight, or ten days, but these motions would hardly amount to the remains of one meal. Two or three days before one of the principal evacuations occurred, the patient began to feel ill, his sleep was disturbed, he was restless, felt disinclined to work, had a very uncomfortable feeling in his back, etc. Then, after a sharp attack of colic, he passed an enormous quantity of horribly offensive fæces; then he felt better for two or three hours, when some more fæces were passed, and so on till he had four or five motions during the day. On the following day he only had a slight attack of diarrhoea, after which his bowels relapsed into their usual torpid state; but he felt so wretched and ex-hausted for several days afterwards that he dreaded the evacuation more than the coprostasis. At the examination it was found that the fæces were principally accumulated in the ascending and transverse colon; these intestines could not only be felt but seen through the abdominal walls; the abdomen was soft, not much distended; the diaphragm was pushed upwards; all the other organs were perfectly normal. The patient had tried every possible remedy to cure himself of this affliction, including electrotherapy, hydrotherapy, and very voluminous enemata, but had never succeeded in obtaining relief. He had at last come to Marienbad, where he drank the water and took baths; the result of which treatment was that the bowels moved once in two or three days. The author tries to explain this curious fact by some anomaly in the innervation of the intestines, owing to which they remained torpid till stimulated by some unknown cause, or perhaps through a reflex act, when the accumulated fæces were suddenly expelled.—British Medical Fournal, vol. i., 1879, p. 594; from Wien. Med. Blätt.
FATTY CHANGE (AND FAILURE) OF THE

FATTY CHANGE (AND FAILURE) OF THE MUSCULAR WALL OF THE GUT AS A DIRECT AND INDIRECT CAUSE OF INTESTINAL OBSTRUCTION AND DEATH.—Mr. Furneaux Jordan has within the last few years seen cases in which, with perhaps no premonitory symptoms, continuous vomiting and tympany, lasting one, two, or more days, have been followed by death. Sometimes these symptoms appeared to come on spontaneously, at other times as the sequel of some abdominal or pelvic operation. The patients were usually obese. Examination of the body showed great internal accumulations of fat, the intestinal canal being always loaded with fat, and in some cases appearing to be simply a tube of fat. No obvious or recognized cause of intestinal obstruction was found. Mr. Jordan believes that the smooth muscular fibres of the bowel are subject to fatty degeneration, which

may become more or less complete, and that, consequently, they may, in given cases, wholly cease to contract. He thinks that in those cases of death after vomiting following the reduction of strangulated hernia, and also operations for uncomplicated hernia, lithotomy, and other operations on the pelvis and abdomen, death does not occur from shock, ether or chloroform vomiting, septic poisoning, or incipient peritonitis; for these do not satisfactorily account for death in the cases he brings forward. In fatty change and consequent failure of the gut, says Mr. Jordan, we have an explanation which is based on clinical and microscopic observation, which clears up all difficulties, and which is consistent with known pathological laws.—British Medical Journal, vol. i., 1879, p. 622.

CYSTS OF THE MOUTH (RANULA).-Mr. Francis Fox says that the oral mucous membrane is not unfrequently the seat of cystic disease owing to the numerous small glands and follicles in this situation. Ranula, according to Mr. Fox, may depend upon (a) obstruction of the outflow from the minute follicles or conglobate glands; (b) it may be connected with the Whartonian or one of the larger ducts, or (c) it may be in no way connected with the mucous structure itself; (d) it may depend upon inflammation of the bursa which is placed between the genio-hyoglossi muscles. Similar cysts to these ranulæ occur in the mucous membrane of the lips and cheeks, and are often met with on mucous surfaces in other regions of the body. Their treatment is simple. If due to local inflammation, a small puncture will quickly effect a cure; or, if the orifice of the duct can be discovered. a small probe may be inserted; or, if arising from a salivary calculus, an incision into the duct will permit the easy removal of the concretion. If the enlargement be excessive, a seton of a few threads of silk may be passed through the tumor, so that the contents will gradually escape, and inflammation be set up. But sometimes troublesome secondary inflammation is set up, and perhaps it is better to puncture the tumor and then apply caustic to its internal surface. It may be necessary to remove a portion of the cyst-wall, in which case the more vascular portion of the tumor should be avoided. In ranula in the sub mucous tissue, which is larger, resembles sebaceous tumors, and contains a thick puttylike substance, the entire sac and its contents should be removed. Ranula arising from an inflamed bursa should be treated on the principle of destroying the secreting surface, and thus curing the disease .- Medical Times and Gasette, April 26, 1879.

CHAULMOOGRA OIL IN PHTHISIS.—Some of this much-vaunted remedy having been placed in the hands of Dr. J. Burney Yeo for trial, he communicates his experience to the *Practitioner*. He says he has found, in several cases, an unusual amount of objection

to taking this oil, and has had to use much persuasion to induce patients to persevere with it. He thinks, if it is to come into use, it must be given in the form of perles. oil when cold is solid; it is therefore necessary to mix it with some other diluent oil. He has used almond oil for this purpose, to avoid complicating the effects of chaulmoogra oil with those of cod-liver oil, with which it has usually been given. Dr. Yeo has given the oil in nine cases of advanced phthisis; of these three died, one failed to improve, one could not take it on account of gastric disturbance, three grew worse under it, and one improved considerably. This result is not hopeful, but the oil is so well spoken of that it should be tried in other cases and in other forms of scrofula.—Practitioner, April, 1879.

IODINE IN THE TREATMENT OF INTER-MITTENT FEVERS.—Dr. J. W. Wadsworth, of Saltillo, Mexico, recommends, in severe cases, ten to fifteen grains of quinine in two doses, during the pyrexia, immediately followed by tr. iodini comp. in doses of ten to fifteen minims thrice daily. In the severest cases the following formula may be used:

> R Liq. potassæ arsenitis, f3i; Tinct. iodini comp., f3ij; Tinct. serpentariæ, Syrupi simplicis, āā f3iss; Aquæ, ad f3vj.—M.

Sig. — A tablespoonful thrice daily after meals.

In Dr. Wadsworth's experience, extending to over three hundred cases, the paroxysm was in every instance arrested within twenty-four hours, and the twelve doses contained in the above prescription were, in almost every case, sufficient to cure without relapse.—New York Medical Journal, May, 1879.

APPLICATIONS TO THE PHARYNX IN SCARLET FEVER, MEASLES, AND DIPHTHERIA.—Dr. Thomas F. Rumbold, in a paper on this subject, describes the various forms of atomizers most appropriate to different cases, as well as the methods of procedure employed successfully by himself. A favorite formula for atomization is as follows:

R Vaseline, Zii; Glycerine, Zii; Acid. carbolic., mj.—M.

This should be warmed before application. It is not unpleasant to the taste, and has a very soothing and agreeable effect. It should be applied once in from two to six hours.—

St. Louis Medical and Surgical Journal, April, 1879.

METALLOTHERAPY IN THE LOWER ANI-MALS.—Dr. George Sigerson has been making a number of experiments upon animals in whom artificial cutaneous anæsthesia had been produced. He finds that effects similar to those obtained by Charcot can be brought about by the employment of metallic disks, etc. —British Medical Journal, i., 1879, p. 620.

RECTAL ALIMENTATION.—Dr. A. H. Smith has obtained valuable results from the use of defibrinated blood. In urgent cases, especially where the stomach cannot be called upon to perform its office at all, thirty to ninety grammes (one to three ounces) of defibrinated blood may be injected into the rectum every two or three hours. For chronic cases, in which it is merely given to aid stomach nutrition, ninety to one hundred and eighty grammes may be given once or twice a day. An ordinary syringe may be employed, care being taken to cleanse it thoroughly after each injection. If the rectum is irritable, the blood should be gently warmed to the tem-perature of the body. The cases in which this treatment has proved useful have been those of pulmonary phthisis, simple anæmia. atonic dyspepsia, dyspeptic asthma, inveterate neuralgia, and nervous exhaustion.-New York Medical Record; from Archives of Med., April, 1879

LARGE SALIVARY CALCULUS.—The Correspondenzbl. f. Schw. Aerzte publishes the case of a sailor who presented a swelling on the inside of the horizontal ramus of the lower jaw. He said he had had similar swellings from time to time during the two previous years, but they had opened spontaneously. Examination showed a large, hard, movable swelling under the left side of the tongue. The Whartonian duct, which was much enlarged at its entrance, was laid open, and a large salivary calculus, weighing one hundred and fifteen and three-fourths grains, was extracted. It consisted of phosphate and carbonate of lime and magnesia. It was triangular, its largest circumference being four and one-third inches, its length one and two-fifths inches, and its breadth nine-tenths of an inch. The other swelling turned out to be a swollen submaxillary gland.—British Medical Journal, i., 1879, p. 625.

HYDRIODIC ACID AS A SUBSTITUTE FOR IODIDE OF POTASSIUM.—Dr. W. G. Wylie recommends this acid in the form of a solution in syrup, which can be made of the strength of forty minims dilute acid to the ounce. Two teaspoonfuls of this syrup constitute an average dose, which may be given in bronchitis, asthma, and chronic or subacute catarrhal disease with good effect. It is especially useful in those cases where the smallest dose of iodide of potassium causes iodism.—

New York Medical Record, May 10, 1879.

DRESSMAKERS' FINGERS.—The Jour. & Hygiène draws attention to a deformity occurring in tailors and dressmakers which has not yet been described. It is a contraction and anchylosis of the two upper phalanges of the fourth and fifth fingers of the right hand, due to the position of the hand in sewing. Prophylactic treatment is advised: the hand must be extended on a board through the night, and gymnastic movements in housework, etc., are to be practised.

IRRITATION OF SCIATIC NERVE; TREATMENT BY PRESSURE.—At the Mount Sinai Hospital a man was admitted, suffering from an exostosis in the middle of the thigh, the result of old fracture from gun-shot wound, which was painful on pressure. The leg was red and swollen; there was also equino-valgus talipes. Both the galvanic and faradic currents caused much pain. Any attempt at walking increased the pain decidedly. Pressure upon the leg by means of an elastic stocking was tried, and in a week after its use the patient was able to walk with ease. An appropriate talipes shoe was procured, which so improved his condition that he considered himself cured, and left the hospital. He said he had not felt so well since the injury was received.— New York Medical Fournal, May, 1879.

Journal, May, 1879. New Form of Female Syringe.—In the Lancet for May 10 is figured an ingenious syringe, by means of which the vagina is kept in a state of dilatation by a cage-like dilator the size of a speculum, while the nozzle of the syringe (pierced with numerous lateral openings) is situated in the axis of the instrument and has full play upon the stretched mucous membrane. A cut accompanies the description of what seems likely to prove a useful instrument. Curiously enough, the New York Medical Record of the same date contains a cut of a similar piece of apparatus evidently independently devised, while an advertisement in the same journal of May 24 shows a third still different. should be said that the second instrument is primarily intended for an "intra-uterine irrigator.'

CASE OF DIABETES MELLITUS MUCH RELIEVED BY CODEIA.—Dr. Allchin gives the case of a diabetic patient, daily passing one hundred and forty ounces of urine of 1025 sp. gr., containing about seventy-two grains of sugar to the ounce, whom he placed upon two grains of codeia thrice daily. Within three weeks the amount of urine passed daily had become reduced to sixty-two ounces, of sp. gr. 1044, with twenty-four grains of sugar to the ounce. This success should be sufficient to induce further trial of codeia in diabetes; for, although Dr. Allchin's patient succumbed to phthisis, the influence of the remedy was most marked.

INFUSION OF BUCKEYE AS A REMEDY FOR CHRONIC RHEUMATISM.—Dr. W. S. Drake had an inveterate case of chronic rheumatism cured by the patient bathing in an infusion of buckeye (*Æsculus Hippocastanum*). The patient had not walked for nearly two years, and had gone through the whole routine of rheumatic remedies. While treating a horse with infusion of buckeye, he found the swelling rapidly disappear from his hands. He then applied it to other joints, and received the same benefit.—St. Louis Medical and Surgical Journal, April, 1879.

MALT EXTRACT .- Although the use of the extract of malt, as made by the various chemists, and given in combination with a variety of other medicines, is so widely spread, yet it may not be out of place to draw attention to the action of this remedy. Malt extracts, says the *British Medical Journal*, are rich in malt, sugar, dextrine, and diastase. Hoppe-Seyler points out that while the dextrine possesses the property of increasing the activity of the gastric secretion, and the diastase assists in converting starch into glucose and dextrine, the malt extract includes also a combination of malt, sugar, alkalies, and phosphates, which together make it a nutrient and medicinal agent of great value. There is evidence that malt extract may take the place of codliver oil in many cases.

ERGOT AND SODIUM BROMIDE IN EPILEPSY. -Professor Bauduy reports (Cin. Lancet and Clinic) a case of epilepsy of sixteen years' standing, which was cured by giving twenty grains of bromide of sodium with half a drachm of fluid extract of ergot three times a day. This treatment was continued a year and a half, and four years have elapsed without the recurrence of a fit.

### MISCELLANY.

POULTICES. - Dr. Lauder Brunton says. "The common practice of mixing the linseed meal with hot water, and applying it directly to the skin, is quite wrong, because if we do not wish to burn the patient we must wait until a great portion of the heat has been lost. The proper method is to take a flannel bag (the size of the poultice required), to fill this with the linseed poultice as hot as it can possibly be made, and to put between this and the skin a second piece of flannel, so that there shall be at least two thicknesses of flannel between the skin and the poultice itself. Above the poultice should be placed more flannel, or a piece of cotton-wool, to prevent it from getting cold. By this method, we are able to apply the linseed meal boiling hot without burning the patient, and the heat, gradually diffusing through the flannel, affords a grateful sense of relief which cannot be obtained by other means. There are few ways in which such marked relief is given to abdominal pain as by the application of a poultice in this manner."

THE ART OF DOMESTIC POISONING. - In a review of a recent book on the poisonous effects of certain dyes and colors used in domestic fabrics, the *Practitioner* asserts that the introduction of poisons into articles of daily domestic use is a perfected art, compared to which that of the poisoners of the Middle Ages was clumsy. "The beautiful greens, and blues, and grays, and neutral tints, with which we deck our walls," says the Practitioner, "are placed there too often at the

cost of intolerable misery to the occupiers of the rooms; the various adornments of feathers and artificial flowers in which woman delights, the fairy-like materials in which she loves to appear in the ball-room, and even more intimate articles of her dress, are but vehicles for the dissemination of an atmosphere of arsenical dust about her, or for exposing her to the influence of some irritant poison; even the drapery of our rooms may contribute to the unhappy fate which dogs us with slow poison within the domestic circle."

Prevalence of Suicide in Different Countries.—The Echo draws attention to

an interesting body of figures just collected by an eminent French statist on this subject. It appears that the Danes, through a series of vears, exhibited the largest average of selfslaughter; while their neighbors of Norway, breathing a kindred climate, are only seventh on the list. The second place is held (as has generally been the case) by France, in which the totals of such deaths fall short of five thousand annually, - one-half due to hanging, one-fourth to drowning, but among women in a majority of instances through inhaling the fumes of charcoal. Returning to the order of nationalities, the Swiss, curiously enough, rank next to the French, and after them the people of Baden, the Prussians, and the Austrians in succession. These last are followed by the Belgians, after whom come the English. The crime is a rare one in Spain, and not a common one in Italy;

but the country in which it is most rare is Ireland.—Medical Press and Circular.

UNIVERSITY OF PENNSYLVANIA: WHAT IS REQUIRED FOR ENTRANCE AT THE COMING SESSION.—Two years ago the medical course of the University of Pennsylvania was so extended as to require three years for its com-pletion. The experience thus gained has suggested several minor modifications of the curriculum, but has also demonstrated the efficiency of its general arrangement.

For entrance at the coming session (1879-80) no preliminary examination will be required, but in the fall of 1880 (session of 1880-81) a preliminary examination will be instituted, which every candidate who has not previously received a collegiate degree must pass. The applicant will be required, 1st, to write a brief essay not exceeding a page of foolscap, which will serve as a test of his qualifications in orthography and grammar; 2d, to undergo an examination in the elementary principles of physics as contained in Fownes's Chemistry; 3d, to pass an examination in easy Latin prose translation (First Book of Cæsar's Commentaries). In lieu of Latin, any language other than English may be substituted.

A CORRESPONDENT writes to the Lancet complaining that all patients who can get out of bed are compelled, at the Middlesex Hospital, to rise at 4 A.M.

THE BULLETIN OF THE PUBLIC HEALTH.-That portion of the Act of Congress of April 29, 1878, which requires consular officers, or other representatives of the United States at foreign ports, to report the sanitary condition of and the departure of vessels from such ports to the Supervising Surgeon-General of the Marine Hospital Service, and so much of the act as requires that officer to frame rules and regulations, and to execute the said act, and to give notice to Federal and State officers of the approach of infected vessels, and furnish the latter with weekly abstracts of consular sanitary reports, has, by Act of Congress approved June 2, 1879, been repealed.

A STATUE IN WESTMINSTER ABBEY TO THE LATE SIR JAMES Y. SIMPSON.—Dean Stanley, it would appear, has granted his consent to the placing of a bust of the late Sir James Y. Simpson in Westminster Abbey. The inscription for the pedestal has been composed by the Dean. It runs as follows: "In memory of Sir I. Y. Simpson, owing to whose genius and benevolence the world owes the blessings derived from the use of chloroform for the relief of the suffering. Laus Deo." The worthy Dean thus unconsciously lends himself to the perpetration of an oft-controverted historical

error .- Medical Press and Circular.

OLD-FASHIONED THESES.—The British Medical Journal gives a selection of titles of theses defended in the Paris school during the fifteenth and sixteenth centuries. Among them are the following: Does Venus beget and expel diseases? Has the plague been sent down from heaven? Has the moon any influence on the humors of the body? Are short women more fruitful than tall women? Is it healthy for old people to put themselves into a passion? Are heroes given to melancholy?

A NOVEL USE FOR WINE.—The Sanitary Record states that the late Sir Walter Trevelyan has left his cellar of wines to Dr. B. W. Richardson "for scientific purposes." The *Record* goes on to say, "It is rumored that the eminent apostle of total abstinence contemplates carrying out the intention of the bequest, by selling the wines (which are estimated to realize at least twenty thousand dollars) and founding a model hospital with

the proceeds.'

SURGERY IN PERSIA.—The Persian surgeons are generally either barbers or farriers. When amputation is performed by a native, the primitive methods observed in Europe before the invention of the ligature are in use. The limb is struck off by repeated blows of a mallet on a chopper, or short sword, or (in the case of a finger or toe) a razor, and then dipped into pitch or oil which is boiling.

Doctors' Bills.—At a recent meeting of

the Northwestern Medical Association of this city, it was resolved that bills should be rendered when services were ended, or at the end of each month, and that the society endorse

a financial agent, who should be employed by the year, on salary, to attend to collection of moneys and keep physicians' accounts when desired.

ENGLISH AND AMERICAN PHYSIQUE.—Mr. Richard Grant White asserts, as the result of wide observation at theatres, festivals, churches, and railway stations, that "English men and women are generally smaller and less robust than ours, and, above all, that the women are, on the whole, spare and less blooming than ours."

MEDICAL FEES IN GERMANY. - It is proposed to revise the official tariff of medical fees in Germany. Here are some of the proposed fees: for a first visit to a patient, 50 cts.: each after-visit, 25 cts.; consultation, \$1.25; office-visit, 37 cts. the first time, 15 cts. (!)

subsequent visits.

A Western professor thus relieves his

overcharged intellect:

"Anatomy, physiology, chemistry, botany, and microscopy have assumed for medicine the morning of a vast and glorious kingdom, whose temple of fame will cope with the hand of war and accompany time through eternity." "This," says the St. Louis Clinic, "is certainly a genuine sunflower of rhetoric.

THE American Neurological Association held its fifth annual meeting in New York City, on Wednesday, June 18, continuing.

three days.

# NOTES AND QUERIES.

THE LATE PROF. GEORGE B. WOOD.

ANENT the anecdotes relating to Professor Wood and the illustrations of his character given in the *Medical Times*, two incidents still cling to my memory, though it is twenty-three years since I attended my last course of lectures. Impressed by my preceptor with a sense of the importance of having his vote, after the examination for the degree, favorable, I took all his public examinations, which were held quite regularly in his lecture-room during the winter session, and regularly in his lecture-room during the winter session, and took pains, with some others, to occupy the same seat every evening. This had its expected effect. When I entered his study for the final examination,—after holding out his hand and asking me to be seated,—he remarked, "I think you attended my public examinations quite regularly?"

"Yes, sir."

"You used to occupy such a seat?"

"Yes, sir."

"I hope we will have no difficulty."

Having asked, "What is the first decisive pathognomonic sign of pneumonia?" and how the crepitation was produced, he dismissed me.

Having asked, "What is the first decisive pathognomonic sign of pneumonia?" and how the crepitation was produced, he dismissed me.

In one of his public quizzes he asked a student how a piece of hepatized lung behaved when thrown into water. Receiving no answer, he asked how healthy lung behaved if similarly treated. Still receiving no answer, he appeared somewhat annoyed by the dulness of his pupil, and said with emphasis, "Why, it swims, sir."

"It floats."

Professor Wood smiled and bowed to his impudent critic, acknowledging the correction.

No man has ever more deeply impressed me than he with his conscientiousness and fidelity to duty because it was duty, and, though I never spoke a word to him but what was necessary by me as an attendant on his lectures, I have never ceased to cherish and revere his memory. To my mind, his skill in lecturing, bringing out and making prominent and clear essentials, and putting all the points in their true relation, so that the dullest could understand and remember and carry away with him, has never been surpassed. He was a teacher beyond all others.

The unanswered question has often passed through my mind, What would this world be if every one, professional and lay, would qualify himself for his position, and then discharge the duties of it with the determined honesty of purpose, re-lying upon solid worth for success, that marked Dr. Wood, instead of trusting to the ad captandum tricks of the charla-

TO THE EDITOR OF THE MEDICAL TIMES:

SIR,—In a very considerate criticism of my book on "Loss of Weight, Blood-Spitting, and Lung Disease," in your journal of May 10, the reviewer has taken so much pains to give a fair statement of my views on consumption that I am sure nal of May 10, the reviewer has taken so much pains to give a fair statement of my views on consumption that I am sure he will not mind my pointing out that he has missed a pasage or two which, had he seen, would have prevented him from stating that "of course all consumption is tubercular under this hypothesis, which has no place for the inflammatory forms." The passages I especially refer to are as follows: (Page 202) "If it is found that in a large number of cases of pulmonary consumption local disease is preceded by constitutional disease by an unequivocal interval, and yet that in a certain number of cases local disease precedes constitutional disease by an unequivocal interval, and yet that in a certain number of cases local disease precedes constitutional disease by an unequivocal interval, the conclusion is almost inevitable that there are at least two modes in which pulmonary consumption may commence." I have labored to show that this is the case, and to explain how it happens, and at pages 166 and 167 I have given "the products of inflammatory destruction of tissue" as one item in "a large and important group, embracing all foreign substances which find their way into the perivascular and perialveolar tissue of the lungs, and by their irritation there set up lymphatic hyperplasia and cell-proliferation and their consequences," and at page 203, referring to the above two classes of cases, I say, "These two classes must be considered as quences;" and at page 203, referring to the above two classes of cases, I say, "These two classes must be considered as absolutely distinct throughout. There is no stage at which they meet on common ground; Class I is always plus

I shall be much obliged if you will find space in your next

number for this correction, as it is one of facts.

Ction, as it is one of ...
I am, sir, yours, etc.,
HORACE DOBELL.

### OBITUARY-FRANCIS FONTAINE MAURY, M.D.

DR. FRANCIS FONTAINE MAURY, of this city, whose premature decease on the 4th instant we regret to record, was born in Danville, Kentucky, August 9, 1840. The scion of a distinguished Huguenot family, whose name is inscribed in the annals of Ireland and France, as well as this country, Dr. Maury seemed to inherit a large share of the intellectual vigor and quickness of apprehension of his race, and from

Dr. Maury seemed to inherit a large share of the intellectual vigor and quickness of apprehension of his race, and from the first promised to attain a high standing in the profession of his choice. Educated at Centre College, Danville, and the University of Virginia, he finished his medical studies at the Jefferson Medical College in this city, graduating in 1862. From that time he settled in Philadelphia, serving for a time in one of the military hospitals, and subsequently entering upon the practice of surgery.

Dr. Maury's progress in the earlier years of his career was singularly rapid. He was appointed Lecturer on Venereal and Cutaneous Diseases in the Jefferson College and Attending Surgeon to the Philadelphia Hospital at an unusually early age, and he soon attained a large practice. Among the capital operations performed by Dr. Maury may be mentioned that of gastrotomy (the first in this country), excision of the brachiat plexus for painful neuroma, the operation for extrophy of the bladder (four times performed), and two operations for extirpation of the thyroid gland. He also published, at various times, reports of operations and cases, and, in connection with Professor Duhring, edited the Photographic Review of Medicine and Surgery during the two years of its existence. As a lecturer Dr. Maury was earnest, almost impassioned at times in manner, with a nervous flow of language existence. As a lecturer Dr. Maury was earnest, almost impassioned at times in manner, with a nervous flow of language which chained attention, and an impressiveness which fastened his utterances in the mind of the student. He was singularly agreeable, almost fascinating in manner, and was distinguished for his kindly notice and encouragement of the young men with whom he came in contact as teacher. Many a timid and retiring young student has been encouraged by Dr. Maury's friendly greeting, making an impression upon him never to be torgotten, and winning his constant regard and affection. Yes; affection is not too strong a word to express the sentiment of many outside of the circle of Dr. Maury's friends, who, though much in his later career pained express the sentiment of many outside of the circle of Dr. Maury's friends, who, though much in his later career pained and wounded them deeply, yet could not resist the recollection of kindly ways and words, and would fain remember him as he appeared to them,—the sympathetic counsellor and ready friend in need. One such desires to place this feeble tribute upon his tomb.

AT a special meeting of the medical staff of the Jefferson Medical College Hospital, held June 6, 1879, the president

having announced the death of Dr. Francis Fontaine Maury, one of the surgeons of the hospital,

one of the surgeons of the hospital,
On motion, it was
Resolved, That by the death of Dr. Maury the hospital
has lost the services of a zealous and efficient surgeon, and
one whose name has been identified with the establishment
and prosperity of the hospital, and with its clinical teaching;
Resolved, That the hospital staff deeply deplore his loss,
and will cherish his memory;
Resolved, That the crayon portrait of Dr. Maury, the first
of the staff taken away, shall be preserved in the operatingroom of the hospital;
Resolved, That a copy of these resolutions be entered upon
the minutes of the medical staff, and that they be sent to the
family.

family.

family.

At a meeting of the Medical Board of the Philadelphia Hospital, held June 7, 1879, the death of Dr. F. F. Maury, one of the surgeons to the hospital, being announced, On motion, the following minute was adopted: Resolved, That the Medical Board has heard, with deep regret, of the death of their late colleague Dr. F. F. Maury, for more than fourteen years one of the staff of this hospital; that in his death the Board has lost one of its oldest, most active, and useful members, the hospital a distinguished, brilliant, and careful surgeon, —a clinical teacher of rare ability, who had endeared himself to thousands of students by his eloquence, skill, and energy, and the profession at large a member who had achieved, in his comparatively short life, a position and success but rarely attained.

### "BURN-BRAE."

"BURN-BRAE."

By invitation of Dr. R. L. Given, a number of prominent physicians of this city and vicinity made, on June 5, an excursion to the private hospital for mental diseases under his care, known as "Burn-Brae," and situated at Clifton Heights, Delaware County, just beyond the city limits. The visitors were met at the station by a committee from the hospital, and driven over to the institution, a distance of about a quarter of a mile. Here they were taken in charge by Dr. Given, who showed the workings of the institution, without and within; after which the party sat down to an agreeable collation, and then departed, well pleased with everything. Before leaving, an informal meeting was held, at which the following preamble and resolutions were adopted:

At a meeting of members of the medical profession of the counties of Philadelphia and Delaware, held June 5, 1879, at the private hospital "Burn-Brae," Dr. R. A. Given, superintendent, of which meeting Dr. A. Nebinger, President of the Medical Society of the State of Pennsylvania, was chairman, the following resolutions were adopted:

\*Resolved\*, That we are most favorably impressed by the beautiful situation of the hospital, its picturesque surroundings, elevated and healthful position, and that an examination of its interior has evidenced completeness in all its departments, admirable cleanliness, neatness, and comfort;

\*Resolved\*, That because of the appointments of the hospital, the satisfactory condition of the patients, and its \*homelike character\*, we wish Dr. R. A. Given continued success in his humane and laudable work.

Thomas H. Andrews, M.D. (Chairman), William H. Pancoast, M.D., Isaac N. Kerlin, M.D.,

Isaac N. Kerlin, M.D.,

### OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY FROM JUNE 1 TO JUNE 14, 1879.

McKee, J. C., Major and Surgeon, Medical Director DEPARTMENT OF ARIZONA.—After inspection of post-hospital at Fort Yuma, granted leave of absence for one month on Surgeon's certificate of disability, with permis-sion to leave limits of the Department. S. O. 64, Department of Arizona, May 31, 1879.

Bentley, E., Captain and Assistant-Surgeon.—Granted leave of absence for one month. S. O. 88, Department of the South, June 2, 1879.

Ewen, C., Captain and Assistant-Surgeon. — Assigned to duty at Fort Elliott, Texas. S. O. 107, Department of the Missouri, June 2, 1879.

BIART, V., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—
The sick-leave granted him from Headquarters, Department of the Missouri, extended one month on Surgeon's certificate of disability, with permission to leave the Department of the Missouri. S. O. 137, A. G. O., June

# PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, JULY 5, 1870.

# ORIGINAL LECTURES

CLINICAL LECTURE

ON A CASE OF SUPPOSED LESION OF THE POSTERIOR PORTION OF THE INTERNAL CAPSULE.

BY HORATIO C. WOOD, M.D.,

Clinical Professor of Diseases of the Nervous System in the University of Pennsylvania.

Reported by Dr. Charles K. Mills, Chief of Clinic for Nervous Diseases.

ENTLEMEN,—The chief interest in the case which I now bring before you is centred in the localization of the lesion. I will first read you a history of the case, and then briefly discuss this question.

W. B., æt. 58, a house-carpenter, on the 6th of August, 1877, a hot day, had been sitting on a bench eating his dinner, and, on attempting to get up, suddenly lost power in the left leg, and fell. He did not become unconscious, but could not regain his feet for half an hour, and during this time he had a tendency, which he could not resist, to roll around on the ground. When he would try to straighten himself, he would roll over again in spite of his efforts. At the same time he had peculiar giddy feelings in the head. In about half an hour he became able to keep on his feet, and, with the assistance of a friend, came to the University Dispensary for Nervous Diseases, a distance of three blocks from the spot where he was attacked. He complained of dull pain and dizziness, and a frequent inclination to fall. He was quite lame in the left leg, and the partial loss of power had also extended to the left arm. He had a decided feeling of numbness in the entire left side, -face, arm, body, and leg, -the sensation being most marked in the left lower extremity, below the knee. In walking he felt as if he was not touching the ground with his left foot, with which he was afraid to step Examination with the æsthesiometer and a faradic current showed marked loss of sensation on the left side, especially in the foot. Farado-contractility was retained. The special senses were not at this time examined.

For four weeks before the attack just described the patient had suffered with a dull pain in the head. The only other history that could be obtained was that for twentyfive years he had been addicted to venereal He denied abuse of alcohol and excess. syphilis.

For two months after August 6, 1877, he continued to report at intervals of about a His vertigo gradually disappeared,

apparently, under the use of bromide of potassium and derivatives. The anæsthesia of the left side improved, but did not entirely leave. It remained most marked and persistent in the foot and leg below the knee. He thought that faradization with the metallic brush greatly benefited the numbness. The motor paresis improved so much that it was no longer noticeable. The man resumed his work as a carpenter. An interesting fact noticed by him was that for a couple of weeks. when he would perspire at his work, the perspiration would be unilateral, being limited to the right half of the body. He said that "he did not sweat at all on the left side."

The patient was lost sight of from the autumn of 1877 until January 28, 1879, when he again returned to the University Dispensary for Nervous Diseases. He stated that during the fifteen months of his absence he had been able to work, but he had not had his usual strength and endurance. His memory was good, but his mind seemed somewhat dulled. During the three or four months preceding his return he thought that he had been failing in health

He was now once more examined, and his condition noted, as follows:

No facial or ocular paralysis was present. All movements of the upper and lower extremities of both sides were preserved, but the left foot and leg were moved more clumsily and with less vigor than the right. The grip of each hand was good. He complained of a constant sensation of numbness in his left foot, and said that when he attempted to lift it it felt as if it weighed three or four hundred pounds. His bowels and bladder were normal. He said that he had the sensation of a band below the left knee and around the left ankle. He also had the "pins-and-needles" sensation in the upper part of the left leg, and in the left arm from the elbow to the hand.

Examination with the æsthesiometer, and with a faradic current, showed slight anæsthesia of the left side of tongue and face, and left arm, forearm, and hand; anæsthesia of the left foot and leg, especially below the knee, was much more marked. Taste was abolished on the left anterior aspect of the tongue. Smell was also defective on the left side.

Dr. W. M. L. Zeigler, Chief of the University Ear Clinic, reported that, after a close examination, no evidence of external or internal ear trouble could be discovered. He could find nothing to account for loss of hearing, and yet the hearing of the left ear was markedly defective; he could only distinguish the tick of the watch when the latter was in contact with the ear, and he could not hear it as well this way as it could be heard on the other side.

His eyes were examined by Prof. William

F. Norris, to whom I owe the following inter-

esting report:

Right Eye. - He has only perception of The disc is seven diameters (seven times the diameter of the retinal veins); there is breadthening of the scleral ring all around, and a central excavation. A slight hemorrhage is seen on the disc, near its outer portion. The upper branch of the central artery of the retina is apparently empty; it is visible as a white cord. At some places there is a suspicion of the walls of the vessels being seen inside. The lower branch of the retinal artery is seen immediately below the disc. veiled by its sheath; at other points it is visible as a white cord. The upper branch of the nasal artery is visible. The veins are full of blood. Large clots of blood are plainly visible in the vitreous, with a convex 18. Black splotches and light lines, corresponding to choroidal veins, are seen. Near the macula, along some of the veins, are manifest hemorrhages, which here and there envelop the vein, and make it appear swollen in some places and shrunken in others.

Left Eye.—Vision  $=\frac{20}{C}$ , or one-fifth of the normal acuity. The disc is smaller than that of right eye, being six diameters. It has a central excavation. The arteries and veins are in normal proportion, but all a little prominent, bending down over the edge of the disc; both are tortuous and coarse. A conus is present on the edge of the disc, with a pigment-loop around it of the width of the retinal veins. The sheath on the lower vein is visible as a white line beyond the disc. In other respects the vessels appear as usual. No vitreous opacities are seen. The central-color perception in this left eye is diminished to about one-fifth of the normal. Peripheral-color perception is markedly shrunken. No

central scotoma.

The refraction of each eye equals  $\frac{1}{18}$ . His heart was sensibly enlarged. The aortic second sound was intensified so as to be heard over any portion of the chest; otherwise the sounds were normal. His lungs were slightly emphysematous.

I have thus, gentlemen, in some detail, given you the history of this interesting case. The last notes which I have read to you were made within a few days, but I will examine the patient before you in regard to the most important points. [The patient was now examined before the class for motor power, sensibility, sight, hearing, taste, smell, etc., with results corresponding to those given in the prepared notes.]

You have, in brief, the history of a sudden cerebral seizure, coming on in a man in fair health, who, however, had previously had some dull headache. The at-

tack caused him to fall, but did not produce unconsciousness. It brought on immediately a peculiar vertigo, with a tendency to rolling movements, and it left him with a temporary hemiparesis (real or apparent), and a more permanent hemianæsthesia, with impairment of the special senses of the same side.

Where is the lesion which has produced this train of symptoms? Evidently it is not in the spinal cord. The disturbances of the special senses of sight, hearing, smell, and taste, and the fact that the symptoms are mainly unilateral, involving the face as well as the body, lead me at once to exclude the cord as the probable

seat of disease.

Presuming, therefore, that the lesion is cerebral, where would it most probably be A lesion of the posterior strands of the internal capsule or peduncular expansion of the right crus cerebri would account satisfactorily for most of the symptoms. Veyssière performed experiments —which have been confirmed by Carville and Duret, by Raymond, and others-in which this set of fibres was ingeniously divided. Cutaneous anæsthesia of the opposite side resulted. Facts have been published, also, to show that impairment of the special senses of smell, taste, hearing, and sight accompanied the hemianæsthesia which is produced by a section of this kind. A remarkable contraction of the field of vision and difficulty in discriminating colors have been particularly Recently, moreover, experiobserved. ments have been performed which go to show that when these posterior fibres of the crus are cut across, disorders of movement result comparable to those which this man describes as having occurred immediately after his attack.

We have, then, physiological and pathological facts which lead up to a tolerably clear explanation of this case. The condition of the color-field of the left eye is such as you would expect to find from this peduncular lesion, or from a partial disorganization of the visual centres of the

cortex.

It is probable that the condition of the right eye was not due to the same lesion which gave rise to the left unilateral symptoms. The appearances of the retinal artery pointed to occlusion. If the main cerebral lesion was thrombosis or embolism, it is probable that similar causes had

led to a blocking of the vessels going to the eye. It is true, however, as Landolt has pointed out, that in cases of cerebral hemianæsthesia interference with vision is

not altogether unilateral.

The unilateral sweating which was present for two weeks is worthy of consideration. The sweating occurred on the right side, the anæsthetic symptoms being present on the left. The central condition may have been such as to interfere with the passage of impressions of vaso-motor centres, if such exist.

If the lesion is not situated in the posterior part of the right cerebral crus (which I think most probable), the combination of sensory phenomena presented can, I think, be accounted for only on the supposition of an extensive lesion of the cerebral cortex, involving the major portion of the

sensory or perceptive zone.

The well-known experiments of Ferrier seem to show that the areas which preside over the special senses and common sensation occupy adjoining portions of the parietal, temporo-sphenoidal, and occipital lobes. Stimulation and destruction of these districts produced various interferences with sensation and the special senses, such as anæsthesia, blindness, deafness, etc.

Pathological data bearing upon the question of the sensory or perceptive regions of the cortex have not been supplied in nearly as great abundance as those in regard to the motor centres. It may be, however, as suggested by Ferrier, that cases are not studied as carefully in regard to sensory as in respect to motor phenomena, the latency being in observation

rather than in symptoms.

On the view that the lesion was one limited to the posterior third of the internal capsule, the hemianæsthesia and loss or impairment of the special senses are due to an interruption of the paths of transmission to the sensory centres of the cortex; on the other supposition, you must suppose a destruction, more or less complete, of these cortical centres themselves.

As to the nature of the lesion, we can only conjecture. If it involved the fibres of the crus, it was most likely a small clot; if it was cortical, the chances are in favor of thrombosis or embolism. Examination of the heart did not disclose a cardiac murmur, although the aortic second sound

was loud and ringing in character. A circumscribed meningo-encephalitis might also perhaps account for the case.

### ORIGINAL COMMUNICATIONS.

### KOLPO-CYSTOTOMY.

BY H. LENOX HODGE, M.D.,

Demonstrator of Anatomy, University of Pennsylvania; Physician to Children's Hospital.

(Read before the Philadelphia County Medical Society, March 26, 1879.)

BY the term Kolpo-cystotomy (derived from χολπος, the vagina, χυστις, the bladder, and τεμνω, to cut) is meant a division by surgical operation of the septum between the bladder and vagina. It may be done for the extraction of a vesical calculus or foreign body in the bladder, or in cases of irritable bladder or chronic cystitis to give constant exit to the urine and thus secure rest to the bladder.

The operation may be done with the knife, the scissors, or the cautery. The best position in which to place the patient is upon her back, with the thighs strongly flexed upon the abdomen, and held there either by assistants or by bandages or other apparatus. In this position, if the duckbill speculum be placed in the vagina and the perineum retracted, the urethra, bladder, and uterus will descend close to the vulva, and any operation may be done with almost as much facility as upon any

part on the exterior of the body.

If the operation is to be done with the knife or scissors, a large grooved staff should be introduced along the urethra into the bladder, and the incision made into the groove of the staff at the point of selection. If thought advisable, the urethra may be divided along its whole course from its orifice, and the incision then carried as far along the base of the bladder as may be thought necessary. Any hemorrhage that may occur can be arrested with the ligature or by the application of the cautery. It is much easier to see the point of hemorrhage and arrest it when the whole urethra is laid open, than when the partial operation into the bladder only is done. When a small opening is made into the bladder, hemorrhage may occur to a considerable extent and be concealed in the bladder, and it will at times be difficult to detect the point from which the bleeding proceeds. When, however, the whole urethra is laid open, everything is exposed to view and the bleeding easily arrested. The urethra when thus divided does not flatten out, but on account of the density of its tissues remains like a sinus slit open, the edges gaping about a quarter of an inch apart.

If the operation has been done for the removal of a stone or foreign body in the bladder, the wound should be at once brought together by sutures carried through all the tissues except the mucous membrane of the bladder. A winged gum catheter should then be inserted and allowed to

remain in the bladder.

If, however, the operation has been done for the relief of an irritable bladder or for chronic cystitis, and the design is to keep the opening patulous in order to give the bladder rest, then the mucous membranes of the vagina and of the bladder may be stitched together. If this is not done, there is a great tendency for even large openings to contract to a mere point or even to close. If the whole urethra has been laid open from the external opening, there is no tendency to close, but the wound remains as a long, narrow, open fistula, with the lower extremity at the position of the orifice of the urethra.

When the operation is done by the cautery, a piece of ivory about half an inch broad should be inserted along the urethra into the bladder. This will protect the upper wall of the bladder from injury. The cautery knife should be brought to a dull red heat, and the bladder divided by several light touches over the position of the ivory director. If the cautery be too hot there will be some hemorrhage, and if it be kept long in contact with the tissues there will be more sloughing. The best form of cautery is Paquelin's thermocautery. It is easily managed, the temperature can be readily maintained, and the instrument is very portable.

One of the conditions for which the operation of kolpo-cystotomy has been recommended is the extraction of a vesical calculus. The operation can be done readily and rapidly, and the stone quickly removed in its totality. These attributes constitute what is ordinarily called a brilliant operation. It must be done with the knife, and not with the cautery. The wound made by the knife can be closed; that made by the cautery must remain open, with all the annoyances of a urinary

fistula. Any hemorrhage can easily be seen and readily controlled by ligature or After the operation, the edges of the wound should be carefully brought together by suture, as in vesico-vaginal fistula, and the bladder kept empty by means of a self-retaining winged catheter, It is of great importance that primary union should be obtained throughout the whole extent of the wound. If this should fail, then follows the dribbling of urine and a vesico-vaginal fistula. There is less reason to expect primary union than under other conditions. The closure of any opening at the base of the bladder is always difficult, and, notwithstanding every care, is often followed by failure, necessitating frequent repetitions of the opera-But these difficulties are increased in cases of vesical calculus, by the irritable condition of the bladder and its intoleration of the presence of any foreign body. even though it be a soft gum catheter. Then again, by the long presence of the stone resting upon the base of the bladder, inflammatory action has taken place, which may be expected to interfere with primary union.

On the other hand, calculi, unless they are very large, may be removed from the female bladder through the dilated urethra. Without the slightest difficulty, the female urethra may be rapidly dilated (even in a child), so as to receive the stone-forceps, and the stone easily extracted; or, if the stone is very large, it may first be broken by the lithotrite, and the fragments rapidly and completely extracted. In a case of mine the patient was only nine years old, and yet, without difficulty, the urethra was dilated so as to receive the stoneforceps, and also my forefinger passed along the handles of the forceps into the bladder. The stone, however, proved very large, and could not be extracted in its totality without injury to the urethra. I then introduced the lithotrite, and broke the stone into fragments, and removed these large pieces which you see in this box. The largest fragment measures one inch and a half by one inch and three-Notwithstanding the great extent to which this child's urethra was dilated, within a few weeks she was perfectly well, and able to retain her urine without the slightest incontinence.

Or, if thought advisable, the stone can be crushed into small fragments without dilatation of the urethra, and removed in one sitting, as recommended in the male, as well as female, by Dr. Bigelow. Dr. Bigelow has demonstrated that the bladder is much more tolerant of such prolonged manipulation than was formerly thought possible.

It therefore seems evident that, in cases of vesical calculus, kolpo-cystotomy does not possess advantages over rapid dilatation or lithotripsy. The stone can be more rapidly removed by the knife, but there is greater liability to incontinence of urine, and a tendency to the formation

of a vesico-vaginal fistula.

In cases of chronic cystitis, kolpo-cystotomy is resorted to in order to give relief to the pain and straining usually present in these cases, and to prevent retention of urine (which is apt to occur), and to allow the bladder rest, in order that all inflammatory results may subside. The object is to leave an opening for a year or more, through which the urine may flow instead of along the urethra. operation may be done either by the knife or by the cautery. If done by the knife. precautions must be taken, by stitching the mucous membranes together, or by wearing a double button or canula, to prevent the fistula from contracting or closing; or else the whole urethra should be laid open, when the wound will remain patulous, although it may be lessened in extent by the contraction of the posterior border. If the operation is done by the cautery, there is less tendency to closure of the fistula, although it will often greatly contract. In one case, upon which I operated with the thermo-cautery, the opening, originally large enough to admit the finger, contracted until only a grooved director could be passed.

The dysuria to which women are liable is among the most distressing of maladies. It may exist perfectly independent of all symptoms of inflammation, and, on the other hand, may be one of the symptoms of chronic cystitis. Any means proposing to give relief under these painful conditions is deserving of the most patient study and careful trial. There is a natural tendency to refrain from any serious operation unless absolutely necessary, but the suffering in these cases is so intense and continued that relief must be in some way obtained. It is not only a relief from pain that is demanded. The in-

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tensity of the pain leads to frequent and desperate efforts to empty the bladder. The straining efforts induce spasmodic contractions, the patient is unable to pass the urine, and retention occurs. The retained urine and the congestion of the bladder cause or increase cystitis, and in time the inflammation extends along the ureters to the kidneys, and the patient may die from nephritis.

A young unmarried woman, about 25 years of age, came under my care in July, 1873, suffering from chronic cystitis. The dysuria was so severe as to resemble the pain due to the presence of a large and rough calculus. Palliative measures only were employed. For a time a winged gum catheter retained in the bladder gave her great relief. In July, 1874, she began to have symptoms of the formation of a large abscess in the region of the left kidney. In August large quantities of pus with a fetid odor were passed from the bladder. She died September 20, 1874.

Under these circumstances of intense suffering, extending through years, and liable at any time to be followed by conditions dangerous to life, even the most serious surgical operation would become justifiable. The operation proposed, however, is not dangerous to life, and is only followed by the annoyances of a vesicovaginal fistula. Kolpo-cystotomy is easily performed, gives rest to the irritated bladder, prevents retention of urine, and greatly lessens the probability of the inflammation extending to the kidney. These great advantages far outweigh the inconveniences of a vesico-vaginal fistula for one or more years. In proper cases, therefore, kolpo-cystotomy ought to be resorted to without hesitation.

What are the proper cases?

In February, 1877, a patient came to me on account of intense dysuria. She was 22 years of age, and unmarried. In October, 1876, she had a violent attack of pain like passing of a calculus. It lasted several hours, and was followed by more or less constant pain. In December she had another severe attack, and since then has been obliged to resort to opium suppositories for relief. The tendency to urinate was frequent both by day and night, and accompanied by intense pain and great straining. Upon examination, the bladder was found to be nearly free

from evidence of disease, but the uterus was completely retroverted. Complete relief to all the severe symptoms followed upon the restoration of the uterus and its

support by a Hodge lever pessary.

Another patient, 59 years of age, and the mother of eleven children, came under my care in April, 1876. For six months she suffered intensely from painful urina-The pain was so severe and constant as to prevent her from walking, and at times from leaving her bed. She described the sensation as if the bladder and prethra were full of "hot grains of wheat," which she was straining to pass. Upon examination, no calculus was found, and no evidence of disease in the bladder. The uterus was large and prolapsed. She was promptly and perfectly relieved by supporting the uterus by a Hodge pessarv.

In such cases as these, where the cause of the disorder can be found and removed, there is no need of other surgical interference. Indeed, kolpo-cystotomy would be worse than useless. The difficulty can be removed not only by simpler measures, but more efficiently and without the annoyances of a fistula, and without the need of a second operation to close the fistula.

In every case, then, in which the cause of the irritable bladder can be found and removed, there is reason to hope for a quick and complete relief, even when the pain is extreme, provided the bladder has

not been altered in structure.

If, however, the cause cannot be found, or, having been found, cannot be removed, or if when removed the pain and inflammatory symptoms continue, then, for the relief of the patient, and to protect her from serious dangers to her life, kolpocystotomy is to be done.

The following cases will illustrate what are the results of the operation when re-

sorted to in severe cases.

Miss L., 40 years of age, has suffered with pains in the back and in the region of the bladder for more than twenty years. She came under my care in February, 1878. She was then obliged to rise twenty or twenty-five times in the night to urinate. In March the urethra was dilated, under ether, so as to receive the finger. This was followed by great pain and the retention of urine, necessitating the employment of a catheter for several days. No relief followed. In May, kolpo-cystotomy was done by means of Paquelin's thermocautery. The opening was made in the base

of the bladder, large enough to receive the forefinger. The operation was followed by partial relief. The urine came away in part involuntarily, by leakage, but in part was passed by straining. In December the operation had to be repeated and the opening enlarged, on account of the contraction of the orifice. In January calcareous deposits formed upon the ulcerated surfaces of the wound, filling up the opening and causing increased suffering. Nitrate of silver was applied to the wound, and the calcareous deposits ceased to form and the patient began to improve. She is now able to remain in bed all night, and to sleep from three to four much less.

Miss A., 30 years of age, has suffered with severe dysmenorrhea from the time her menses first began. For seven years she has suffered greatly with dysuria. The urethra has been frequently dilated and many applications made to the bladder. More than a year ago kolpo-cystotomy was done, and the opening afterwards enlarged, because the urine did not flow freely. She has also been under active treatment at different times for pelvic cellulitis, metritis, and ovarian neuralgia. She came under my care in February, 1879, still suffering with intense dysuria. Urine at times retained. The pain was like that of being pierced by a thousand red-hot needles. The best relief she could obtain was from the injection of hot water into the

Upon examination, the uterus was found enlarged and anteverted, the bladder and urethra very sensitive to pressure, and the fistula patulous and situated in the base of the bladder. As the neck of the bladder and urethra would not bear the presence of any urine, the urethra was laid open on a director from the external orifice, and the incision carried along the base of the bladder to the fistula. This operation was followed by increased retention of urine. Her person has been for the most part dry, and she passes her urine into a vessel, and with much effort. The wound has now healed, but it is too soon to judge of the effect of the

operation.

The most striking peculiarities in these cases are that the operation did not remove the pain and did not prevent the

urine from being retained.

First, why did not the operation remove the pain? In my opinion, because the pain in these cases is reflex, and, therefore, due to a disorder in some other part. These cases clearly prove that the pain is not due solely to the presence of the urine in the patient's bladder. The sensations of the patients would seem to indicate that all their sufferings were due to the presence

of the urine in the bladder. But when free exit was given to the urine by an opening in the base of the bladder, the pain and straining continued. In one case the whole urethra and neck of the bladder were laid open. In this case all possibility of any urine remaining in the bladder and irritating its walls was removed, and yet the pain continued. There must be, therefore, some other cause for the pain. In these cases the pain did not cease when the wound was healed, but continued with considerable severity in one case for many months, and was greatly aggravated during the monthly period, and closely associated with pains radiating down the limbs. If it be correct, then, that the pain is in great part reflex, the result of the operation shows still more plainly the importance of finding and removing the cause of this reflex pain before resorting to kolpo-cystotomy, and also the importance of removing the original cause, even after the operation has been done for the relief of the bladder.

Second, why is the urine retained after the fistula has been established? position and relation of the vagina are such that it is capable of containing and retaining fluids. While reclining upon a bed, and even to a degree when in the upright position, the fluid gravitates towards the uterine intead of the vulvar extremity of the vagina. And the reflex pain and irritability of the vagina cause a spasmodic contraction and closure of the orifice of the vagina. The fluid thus retained is difficult of expulsion, because it must be done almost entirely by the abdominal muscles and diaphragm acting at a great distance and under many disadvantages.

Another point of interest in one case was the tendency, during the progress of cicatrization after the application of the cautery, to the deposit of calcareous matter on the ulcerated surfaces; thus giving ocular demonstration of the probable origin of some incrustations of stone found at times in the vesical walls. It was also very instructive to notice how immediately this tendency ceased upon the application of nitrate of silver.

Bearing the above facts in mind, we can arrive at a more correct estimate of the value of kolpo-cystotomy. We should not expect it to relieve all the pain, and we should not anticipate that the urine will

pass away without any effort; but by it we may expect in time to lessen the pain and do away with many of the dangers of cystitis and nephritis.

# CASE OF DOUBLE VAGINA AND DOUBLE UTERUS, WITH IMPERFECT MENSTRUATION.

BY D. F. WOODS, M.D.,

One of the attending Physicians to the Presbyterian Hospital, Philadelphia,

HE following case possesses great interest, on account of its anomaly and rarity. This was the result of a congenital freak. The gradual development and growth of the uterus on the left side partly obliterated the slower growth of the one on the right. The two impinging upon each other at each menstrual term produced constrictions and inflammations which caused thick exudations of membranes, and these obstructed almost entirely the natural drainings of both uteri. So completely buried up in tissue was the one on the right side that no part of it, not even its os, was known, until the revelations of a post-mortem. Had there only been one uterus, the success of treatment would most likely have been assured in a speedy cure. As the history of the case will show, when the drain of the left was clear, the right uterus poured forth a discharge which kept the whole system continually tainted by a pool of menstrual discharge having no outlet, and only removed by absorption.

Some time ago I was summoned to see Miss S., aged 19 years, apparently a muscular, well-developed lady, notwithstanding she bore the countenance of one who had endured much mental and physical suffering, and was somewhat anæmic. inquiry into her history, I learned from her mother that she had been a remarkably healthy child, of a ruddy complexion, of a lively disposition, and knew not what it was to be sick until about the age of puberty; that she had commenced to menstruate at the age of thirteen years, but only a few drops appeared, sufficient to produce a slight show. I further learned that this scanty menstruation was accompanied with much pain, and that her periods had been very irregular ever since. At times vicarious hemorrhage from the nose and, less frequently, from the throat had appeared. When this vicarious hemorrhage was freest her comfort and relief were

greatest.

When I saw her she complained of chills succeeded by fever and perspiration. Her pulse was feeble and rapid, tongue furred; said she loathed food, and had had no appetite for many months. She suffered from nausea, vomiting, and occasional diarrhœa. Her abdomen, back, and pelvic regions were exceedingly sore, so much so that the slightest pressure caused her to cringe. Petechial spots were visible in various places over the abdomen. appeared from time to time on different parts of the back and pubis. This state of things, according to her description, had continued for many months. making an examination per vaginam, I found the canal very sensitive and swollen, so much so that the index-finger could scarcely pass. The cause of this I afterwards discovered in an abscess, situated at the posterior wall of the vagina, which prevented her bowels from being emptied At this time she had without great pain. not had a movement for three days previous, and then she said the pain was very intense. I at once lanced the abscess, drawing therefrom about a gill of purulent fluid containing a soft, shreddy material, more or less adherent to the parietes. It seemed rather the result of circumscribed gangrene than true suppuration, for it had a fetid, gangrenous odor.

I ordered a vaginal wash of a weak solution of carbolic acid and tepid water to be used each day, and constitutionally tonics of quinine and iron with milk punch, leaving her, as she expressed it, "feeling much better." The next morning I was sent for; vomiting had occurred, and she complained of pain in the pelvic region, extending up to the umbilicus; ordered her lime-water and milk, with hot fomentations over the abdomen. This had the desired effect, and she improved slowly.

Some few days after this I made a speculum examination, but could discover, to my surprise, no trace of the os uteri. With the use of a very fine sound I succeeded with difficulty in entering an opening near the region of the os. With a very fine seatangle, and afterwards with sponge-tents, I dilated this orifice and discovered the os uteri beyond this opening, chained down, as it were, with fibrous bands reflected over the mouth, concealing it from view and forming a *cul de sac*. The fluids of the

uterus emptied into this, and, the opening being so small, the liquid could not escape. Most of the menstrual fluid being held there was, from time to time, undergoing such changes as to produce the various symptoms of blood-poisoning and pyæmia with which my patient had been suffering for many months, and perhaps years.

The condition of things being so anomalous, I requested in consultation Dr. R. A. F. Penrose, and afterwards Dr. Ellerslie Wallace, After careful consideration of the case, it was thought advisable to cut away part of the stratum which bound down the os uteri. Accordingly, the patient being put under an anæsthetic, a Vshaped piece was removed, making the passage to the os more complete. hemorrhage was overcome by the use of a solution of persulphate of iron. After this operation the patient improved rapidly for a time, but still the neck and mouth of the uterus were not free to move, and menstruation was imperfect. About a week after the first consultation (after the operation) the opening into the cul de sac before mentioned could be made sufficiently large by stretching to force the index-finger through. Dr. Wallace made the exploration, and discovered a sinus extending down to the inner labia, about four inches in length, on the right side, and gave it as his opinion that it was a false vagina, and not a sinus made by the burrowing of an abscess, as we all had supposed before this explora-Dr. Penrose and myself, after an examination, verified his diagnosis. Neither of us, however, was able to detect more than a single os uteri. We decided to slit up the partition between this (supposed) false vagina and the true one. This was done by passing a suture of strong cord into the upper opening and bringing it down to the lower part of the anomalous sinus, piercing the wall at its lowest mar-In a few days the cord cut its way through the partition, giving us a chance to inspect carefully the old sinus, and making it plain to each of us that the opinion of Dr. Wallace was correct, -that a congenital false vagina existed without any external opening. This false vagina was a receptacle into which the menstruation was poured each month, undergoing metamorphosis and being, by its decomposition, a "cess-pool," which, from time to time, acted as a blood-poisoning element, breaking down the health and producing the various pyæmic symptoms which the patient complained of when I first took

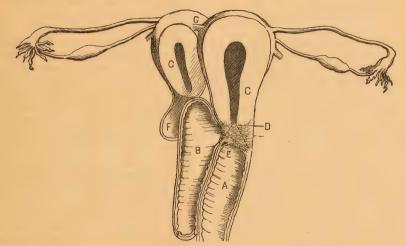
charge of her.

After this her health improved. Her menstruation, though painful, came on regularly, but small in quantity and clotted. At a subsequent visit, Dr. Penrose succeeded in introducing a sound to the fundus, proving that there was a distinct passage. The mouth and neck of the uterus were still bound by fibrous adhesions. These we cut, and, after the wounds healed, all the purulent and sanious discharge for a time ceased; the abscesses and petechial patches disappeared; the patient regained her appetite; her cheeks resumed the healthy rose-color; and for several

abscesses reformed, and menstruation was more scanty and difficult; the vicarious hemorrhage from her nose and bronchi increased; altogether she was feeling (as she expressed it) "wretched;" yet to appearance she seemed remarkably healthy. After the incision of the neck of the uterus, its mouth and passage were dilated at various times by an instrument devised for the purpose, and each time this dilatation overcame, in a great measure, the pelvic heaviness and pain, by giving free exit to the uterine discharges.

Although the patient retained her plump and healthful appearance, she continued to suffer almost constantly until her death, which was preceded by days of vomiting

and weeks of increased pain.



A, true vagina; B, false vagina; C, C, uteri; D, V-shaped piece removed; E, small opening from true vagina; F, abscess discovered after death; G, opening between the two uteri.

months all her maladies disappeared except the dysmenorrhea, which she had

had from puberty.

So well did she look and seem that it was not necessary to see her professionally for several months. After an interval probably of six months, the hopes of her family and her doctors were blasted by a return of the former grave symptoms. At this juncture Dr. D. Hayes Agnew was called in consultation, and, after careful consideration, it was decided to slit up the anterior neck of the uterus. This gave her some relief for a time, probably incident to the hemorrhage which ensued, draining the uterus, and thus thwarting inflammation, which otherwise would have followed. In the course of time vaginal

Post-mortem, twenty-four hours after death, showed a double uterus; the left uterus much larger and better developed than the right; the os of the left extending farther down into the pelvis; the body coalescing with the one on the right side. There was a small opening between the two at their fundi, and one Fallopian tube to each. There was salpingitis on the right side, none on the left. The inflammation extended to the right ovary, which was enlarged and also inflamed. There was pelvic peritonitis, and along the course of the rectum there was an ulceration two inches in length, having the appearance of a former abscess. There was half a pint of pus in the pelvic cavity. The ligaments of both uteri were highly in-

flamed; much pelvic peritonitis, but no peritonitis above the uteri and the append-The right uterus was completely covered by adherent membranes; at its mouth there was an abscess two inches in diameter. No doubt, from its situation. this purulent matter was increased at each menstrual period, and, by being reabsorbed from time to time, produced most of the blood-poisoning at the latter part of the patient's illness. The left uterus was also adherent by thick pseudo-membranes extending over the neck, but not entirely blocking the passage from the mouth to Douglass's cul de sac was the vagina. obliterated by exudations from chronic inflammation.

## TRANSLATIONS.

NEUROPATHY IN A DYSPEPTIC.—M. Rueff says that nervous troubles due to dyspepsia are not infrequent. In one case given, vertigo, preceded by cloudy vision, was observed. When this patient was placed in a bright light his vision became obscured, and he appeared blinded for a short time. M. Rueff also reminds us that hypochondria with the apprehension of impending organic disease is often symptomatic of gastric disturbance, when no physical signs show themselves in connection with the stomach itself.—Le Mouvement Méd.

Influence of Injuries in the Develop-MENT OF TABES DORSALIS.—L. H. Petit, in a work "crowned" by the Paris Société de Chirurgie, bases his conclusions upon fortyseven recorded cases. He says that direct or indirect injuries of the spinal column (falls upon the back, seat, or feet) are followed by concussion of the spinal cord, from which, under some circumstances, chronic myelitis and tabes may develop. In persons subject to arthritis, syphilis, or alcoholism, and also in individuals predisposed to sclerosis, general injuries, by irritation of the spinal cord, may favor the development of tabes; injuries may cause the relapse of tabes which has been cured, and favor the progress of the condition when present. Since tabes is frequently accompanied by disturbance of nutrition in different tissues, it may influence the course of local wounds: this is shown by observations on contusion of the joints, fractures, and injuries of the soft parts. The author gives a case of Tenorier's, in which a man of 38 who sustained a simple fracture of the thigh in pulling off a boot suffered from consecutive suppuration.—
Cbl. f. Chirurgie, 1879, p. 324; from Rev. Mensuelle.

TUBERCULAR ARTHRITIS.—Lannelongue gives the case of a boy, 121/2 years old, of a healthy family, who three months previously had been suddenly seized with a pain in the left knee, which, although it became swollen, permitted him to go about for six weeks. When first seen, the left lower extremity was weaker than the right: there was some swelling, with moderate effusion into the knee-joint. The bursa extensorum, as well as the capsules on both sides of the patella, were slightly thickened. The joint and inner condyle of the tibia, which were slightly prominent, were tender on pressure. Flexure to a right angle was possible, movement smooth. Rest, painting with iodine, and the elastic bandage were of no use. patient died of tubercular meningitis after a time, when examination showed tubercles in the pia, in the lungs, and in the pleura. In the greatly swollen synovial of the left knee, reddened also here and there, were numerous whitish transparent and opaque nodules as in the pia mater; these were shown by the microscope to be tubercles. The cartilages of the knee-joint, generally smooth and shining, yet showed little granular excrescences and pits here and there. A softened white deposit in the inner condyle of the tibia beneath the The vertebræ were sound. cartilage. Lannelongue is of the opinion that this is the exclusive cause of those cases of tumor albus where the bones are relatively healthy, while the synovialis appears to be chiefly diseased. In the granulation-growths of these cases the tubercular eruptions can no longer be observed so unmistakably. He considers the eruption in the synovial primary, and thinks the disease apparently curable.— Cbl. f. Chirurgie, 1879, p. 333; from Bulletin de la Société de Chirurgie de Paris.

A CASE OF SYPHILITIC PHTHISIS.—M. Gouguenheim, at the Société Médicale des Hôpitaux, presented the lungs of a syphilitic patient who had died under his charge. The right lung was the seat of general tubercular infiltration; the lesions in the left lung were the result of syphilis. In the latter were also the lesions of pneumonia, partial pleurisy of the base, with

the presence of a milky liquid holding caseous matter in suspension. In addition there were cavities of various sizes, some due to the breaking down of gummata, others to true dilatation of the bronchi under the influence of interstitial pneumonia and peribronchitis. At the base of the right lung was a mass of friable calcareous tissue, softened in its centre, and due either to a gumma or an old encysted pleuritic effusion. The comparison between the lesions of the two lungs was very strik-The patient was a man of 45, who had been treated for serpiginous ulcers, together with advanced phthisis on the right He was cured and discharged, but returned at the end of some months with syphilitic phthisis of the left lung. died of phthisis. - La France Méd., 1879, p. 309.

ARGYRIA FOLLOWING NUMEROUS CAU-TERIZATIONS OF THE PHARVNX WITH NI-TRATE OF SILVER. - Il Morgagni tells of a woman of 46, who, having submitted to numerous cauterizations of the pharynx with nitrate of silver, showed a bluish discoloration over the whole surface of the Two other cases of a similar character having been published, the writer in Il Morgagni concludes: 1. That frequent cauterizations of this sort are liable to produce discoloration of the skin. 2. That the absorption of the silver may take place in part through the mucous membrane, but probably is chiefly due to swallowing. -La France Méd., 1878, p. 293.

Ammonio-Sulphate of Copper in Neuralgia of the Fifth Pair.—Dr. Féréol adds his testimony to the accumulating evidence in favor of this medicine. He has used it in powder, given in cachets de pain, but finds that in this form it causes pain in the stomach. It is better supported in mixture, and Dr. Féréol suggests the following:

R Cupri ammonio-sulphat., gr. ij; Aquæ destillat., fʒiij; Syr. aurantii flores, ad fʒiv.—M.

Two to four spoonfuls of this mixture are to be taken after each meal, and the remainder in small quantities from time to time, so that the entire quantity shall be consumed within twenty-four hours.—Bull. Gén. de Thérap., 1879, No. 8.

TREATMENT OF SUBACUTE AND CHRONIC ARTHRITIS BY TROUSSEAU'S POULTICE.—Dieulafoy takes a pound or so of bread, and, removing the crust, cuts it into bits.

soaks these in water for a quarter of an hour, then takes them out, and, enclosing them in a piece of linen, expresses a portion of the water. The mass is then placed in a water-bath, where it remains for three hours, and is removed having the consistence of dough. This is softened by the addition of small quantities of spirit of camphor, and kneaded until it becomes like putty. Much stress is laid on the attainment of this putty-like condition. This dough is pressed out flat and square upon a piece of linen, which it covers to the thickness of a third of an inch. following thinly fluid mixture is then spread over the surface of the plaster:

R Pulv. camphoræ, Əv; Extract. opii, Extract. belladonnæ, āā Əiv; Alcoholis, g. s.—M.

The poultice is now ready, and is to be applied closely around the affected joint, and covered with oiled silk. The limb is then tightly bandaged so as to procure immobility, and the bandage is sewn together. This apparatus remains in place for eight or ten weeks, and may then be removed and replaced by another similar one. Dieulafoy, who has used this poultice in fourteen cases, recommends it most highly.—Cbl. f. Chirurgie, 1879, No. 18; from Gaz. Hebdom.

TREATMENT OF DYSPNŒA BY HYPO-DERMIC INJECTIONS OF MORPHIA. - Dr. Huchard says that in heart troubles, and particularly in aortic troubles where there are symptoms of cerebral anæmia, welldirected hypodermic injections of morphia rapidly overcome the tendency to vertigo. syncope, and dyspnœa, probably acting by the well-known influence of opium in determining congestion of the brain. The same effect is produced in the dyspacea of advanced phthisis and in that of uræmia, when, contrary to the general belief, morphia may be given without fear. Dr. Huchard administers the remedy to the amount of one-sixth to one-half of a grain, sometimes combined with one-sixtieth of a grain of sulphate of atropia, in twenty-four hours.—L'Abeille Méd.

CITRON-JUICE IN CHRONIC ENLARGE-MENT OF THE TONSILS.—M. de Saint-Germain paints chronically enlarged tonsils twice daily with citron-juice with good effect, curing his cases generally within a fortnight.—Rev. de Thérap.; from Jour. des Sci. Méd. de Louvain.

# PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, JULY 5, 1879.

### EDITORIAL.

### VITAL STATISTICS.

GENERAL F. A. WALKER, the Superintendent of the Census, has just issued to every physician and surgeon in the United States, whose address is known at the office, a register in book form, intended to contain a record of deaths during the year June 1, 1879, to May 31, 1880.

These registers contain twenty-four pages, ruled, with headings to indicate the locality, date, name of the patient, sex, color, age, date of birth, occupation, cause of death, and fact of bost-mortem being held or not, and are to be signed with the name of the physician. communications are to be strictly confidential. Every facility will be afforded for the transmission of these records to the census office at the end of the year. Any physician who may have failed to receive his book of record can obtain it by simply sending a postal card, containing his name and address, to the Superintendent.

It is expected that these books, when collated, will present a complete statistical account of the mortality and morbility of the United States.

The scheme now proposed has been submitted to many physicians, sanitarians, and vital statisticians throughout the United States, and has received their unanimous approval, together with that of the American Medical Association. Of course, every effort will be made, through the usual official agencies of the census, in the enumeration beginning June 1, 1880. But physicians throughout the country can do much to render the vital statistics of the

United States far more comprehensive and complete than they have ever been. It is to be earnestly hoped, therefore, that this enterprise of General Walker's may meet with the cordial support of the profession, and that no one will grudge the trifle of time and trouble which it may cost him to do his part towards the attainment of the desired result.

### SEATS FOR SALESWOMEN.

THERE is a class in the community—an important class, since the individuals composing it are in many cases to take their place among the mothers of the coming generation—whose needs are not looked after as they should be by the philanthropist and the humanitarian. We refer to those young women who are found behind the counters in our ordinary retail stores on Chestnut, Eighth, and other streets.

These girls are expected to dress neatly on a minimum of salary, to be on duty from eight o'clock or earlier in the morning until six or later at night, with an interval for rest and dinner of half an hour (or, rarely, an hour) at midday, and, during all this time, must be constantly on the alert, ready to please the capricious taste of the buyer (bona fide or pretended), constantly moving, and, in the busy season, without a moment's rest, perhaps, from morning to night.

As it is the common lot of humanity to labor, perhaps we need not waste sympathy upon any one class to the exclusion of others, but as physicians we are called upon, from time to time, to protest against such oppression of the working classes as may be prejudicial to their own health and that of the community at large. With a refinement of — we will not say cruelty, but — severity, these shop-girls are frequently—in fact, we may say generally—forbidden, under any circumstances, to seat themselves or take any rest during the hours of labor. The shop may be empty;

it may be rainy or dark; the day may be practically over, and absolutely nothing doing; and yet these unfortunates, like sentries in the face of the enemy, must be constantly on the alert.

Nor is there any change in this rule for the varying conditions of the system. As the periodical return of languor and, perhaps, pain intimates the call of the system for some rest, some mitigation of the usual labor, the wear and tear of this constant standing position becomes almost beyond endurance. Uterine disease is induced when there is the least tendency to it, and aggravated to a high degree when it exists: and many a young woman leaves the duties of the shop to take up those of maternity with the seeds of future disease implanted, and needing only the added stimulus of child-bearing and lactation to break out and give rise to chronic invalidism.

That this injustice and unnecessary oppression should be remedied by those most interested in keeping it up—the heads of these establishments where young women are thus employed—is too much to expect of human nature. Ignorance and cupidity would find sufficient excuse in the necessities of business, even were the suggestion of reform made. The impulse must come from without, and no one is more fit to suggest the necessity of a change in the direction of more humane treatment for the female employees of the establishments alluded to than the physician, who, it may be, is the adviser at once of the proprietor and of the saleswoman.

Our English relatives are ahead of us in this matter. In London and some of the larger towns, associations have been formed for the amelioration of the condition of shop-girls, and already much good has been done in this way.

Measures of this sort are clearly within the province of the physician, who is alike qualified, both from his knowledge of the consequences of bad hygiene and his position as trusted adviser in many families, to inculcate those humanitarian measures which should interpose between the strenuous demands of avaricious capital and the consequent suffering of helpless labor.

### LEADING ARTICLES

RECENT INVESTIGATIONS INTO THE PHYSIOLOGY OF THE PER-SPIRATORY SECRETION.

THE physiology of the secretion of sweat has, within the last few years, attracted the attention of investigators to a considerable extent; so much so that between twenty and thirty papers upon this subject have been published in a little more than two years. Some of these have been noted in our columns from time to time, as they have appeared, but the recent publication of a general article on the subject by Dr. Blanchard\* affords us the opportunity of collating the results thus far attained, and of giving a general view of our recent acquisitions in the knowledge of this important function.

In 1876 two authors, Ostroumow and Luchsinger, demonstrated, quite independently of each other, and without any knowledge of each other's work, that the secretion of sweat is not dependent upon the circulation, but is a true nervous function. Kendall and Luchsinger found that by exciting the sciatic nerve in dogs and cats an abundant secretion of sweat could be produced upon the sub-digital pulps, and that the phenomenon was produced even at a low temperature. The perspiratory secretion is not then, it thus appears, a simple transudation directly dependent upon the circulation. This is shown still further by the fact that irritation of the nerve, even in an amputated foot, produces the same secretion. Sweat may be considered as analogous to saliva in being a true secretion, and the special activity of the glandular cells is only excited by the irritation of certain nerves,—the secretory nerves,-and is not to be brought about under any circumstances if these nerves are not irritated. In another important paper. Luchsinger showed that the sudoriparous fibres of the sciatic nerve are derived from the abdominal branch of the great sympa-He also stated that the sudoripa-

<sup>\*</sup> La sécrétion de la sueur;—état de la question. Le Progrès Médical, 1879, p. 322.

rous fibres (of the posterior paws in the animals operated upon) are connected with the cord by communicating branches; they are found in the anterior roots, and arise from the cord by the first four lumbar and the last two or three dorsal roots. Luchsinger also showed that the secretion of sweat may be brought about reflexively.

Pilocarpine, injected hypodermically, produces, as has been shown by Weber and others, an abundant secretion of sweat. Luchsinger demonstrated that this occurs through excitation of the centres. abdominal aorta of a cat having been ligated, pilocarpine was injected into a Of course it could not reach the glands of the paw and excite them directly, nevertheless the secretion of sweat was Again, if after a copious produced. perspiration was produced by pilocarpine atropia was injected, the secretion of If then some more pilosweat ceased. carpine was injected into a paw, this paw soon became bedewed with perspiration, while the rest of the body remained dry. Luchsinger concluded from this a double antagonism between pilocarpine and atropia.

Nawrocki confirmed these researches of Luchsinger, and demonstrated, in addition, that in the cat there exists a common sudorific centre in the medulla oblongata for both fore and hind paws. He also demonstrated the course of the fibres influencing the secretion of sweat in the

fore paws.

A little later appeared Adamkiewicz's pamphlet "Die Secretion des Schweisses, eine Bilateral-symmetrische Nervenfunc-tion." In this work, based upon experiments made in man as well as the lower animals, Adamkiewicz confirmed Luchsinger's opinion that the secretion of the sweat is independent of the circulation. Like that author, also, he showed that it may be produced by different conditions, as (1) by artificial and voluntary irritation of the muscles and of their nerves; (2) by the imagination; and (3) in a purely reflex manner, by cutaneous excitation. Adamkiewicz also showed that in man the secretion of sweat is always bilateral and symmetric, and is independent of the point at which the irritation producing it is ap-Among thermic excitants heat alone can provoke it; cold seems to be without influence.

With regard to the sudorific centres,

Adamkiewicz, as the result of his investigations upon young cats and upon the human subject, arrives at conclusions quite different from those of Luchsinger and Nawrocki. He asserts that "the nervous apparatus which presides over the secretion of sweat appears to originate on the surface of the brain."

Vulpian, whose researches have been published in the Comptes-Rendus, is inclined to differ from the earlier-mentioned observers with regard to the origin of the sudorific nerves; he considers them as arising, in part, from the roots of the sciatic, not simply from the abdominal sympathetic. He also points out the connection between the sudorific and salivary secretions through the sympathetic. pian, however, agrees with the other investigators in regarding the secretion of sweat as quite independent of the circulation, or certainly without necessary connection with it. In man, either in a normal or in a pathological condition, it is well known that an abundant perspiratory secretion may take place while the cutaneous circulation is slow and the skin pale or cyanosed. In cats an abundant hemorrhage produced by a wound of the digital pulps diminishes and tends to arrest, when the peripheric segment of the corresponding sciatic nerve is faradized; this experiment places beyond doubt the possible coincidence of an exaggerated secretory action of the sweat-glands, and. at the same time, a marked diminution of the afflux of arterial blood in the digital pulps of the corresponding member. Luchsinger, it should be said, has recently admitted Vulpian's view of the origin and distribution of the sudorific nerves as correct.

Finally, Trumpy and Luchsinger have, within the last few months, shown that the perspiratory secretion in man is not acid, as has been generally believed, but is in reality alkaline. The old mistaken view has probably arisen from the admixture of sebaceous matter, which is either naturally acid or becomes so by decomposition. The importance of these recent advances in physiology is certainly great, and there is reason to expect still greater discoveries in this direction before long; especially is there hope that light will be shed on some of those obscure pathological processes in which abnormal sweating forms one symptom.

### PROCEEDINGS OF SOCIETIES.

PHILADELPHIA COUNTY MEDICAL SO-

AT a conversational meeting held at the hall of the College of Physicians. Philadelphia, March 26, 1879, Dr. Henry H. Smith, President of the Society, in the chair, Dr. H. Lenox Hodge read a paper upon "Colpo-Cystotomy," with a report of several cases illustrating the operation. (See p. 471.)
In reply to questions from Dr. O'Hara, Dr.

Hodge said that in vesical calculus it is usually preferable to dilate the urethra, and thus remove the stone, rather than resort to any cutting operation. When the urethra has thus been dilated it generally quickly returns to its normal condition, and the urine is often

perfectly retained.

As regards the temperature of the water necessary to relieve pain, it is advisable to have it as hot as the patient can bear.

Dr. Albert H. Smith said that he was gratified with the paper of the evening, but was compelled to differ in some points from the lecturer. In regard to the method of performing the operation, he could not agree with him as to the position of the woman, and believed it to be of great importance to have the patient properly placed in any gynæcological procedure. He preferred the kneeelbow position. In order to use the Sims' duck-bill speculum, with the patient upon her back, she must be placed so that her hips are far over the edge; there must be plenty of room. And then, if etherization is at all moderated, the patient is liable to struggle and twist herself, with the duck-bill speculum against the edge of the bed. The advantages of the knee-elbow position are that the diffi-culty with the speculum is avoided, and that the viscera draw the uterus and the anterior wall of the vagina so as to give a better control of the part than before, and the operator gets a much better view of the anterior wall of the vagina than in the other way. You are looking down upon the field of operation when the patient is in the knee-elbow position, but when on the back you are looking upwards.

The writer of the paper also insisted upon the preliminary division of the urethra. Smith was unable to see how, in any great pro-portion of cases, it is at all necessary to lay open the urethra to explore the bladder. If we can dilate the female urethra sufficiently to enable us to introduce a finger, it is not necessary to use the knife. Why should we complicate the operation by opening the lower part of the vagina, and injure the bladder at a place where it heals so slowly? Then again, he did not like to interfere with the sphincter muscle when it is possible to do without, especially where we afterwards want to heal up the wound. By the introduction of the finger

into the bladder we can thoroughly explore the wall, accurately calculate the exact position of the proposed incision, and, pouching out the septum, use the finger as a counter-support in cutting through the walls. Then, as regards the thermo-cautery, he could not agree with Dr. Hodge, as he preferred the knife. From observation of cases, he had concluded that it is better to use the knife. The introduction of a red-hot instrument of any kind into any of the interior portions of the body, when the patient is etherized, is a source of danger which it is better to avoid. We may have to use it in malignant disease of the uterus or to stop hemorrhage, but only in urgent need. We know that etherized patients often struggle and give a sudden lunge to one side or another, which would be dangerous with a red-hot instrument in the hand. Then you lose the advantage of having the finger to guide the instrument; you would not like to have a finger in the bladder, and cut down with the hot knife upon it. With the knife you have an opening which, when you are ready for it to close, will do so more surely, and without loss of tissue or cicatricial contraction. Nor, in his experience, had the danger of hemorrhage been so great as feared; and it generally ceased after the insertion of the silk ligature or the wire. There is never any hemorrhage that could be considered dangerous from such a wound at the time of operation.

The lecturer had spoken of the difficulty in keeping open the wound after it is made. This is also met by Dr. Emmet, who advises the use of a peculiar self-retaining instrument (of glass), which keeps the wound open, and, at the same time, admits of connection with a rubber tube and urinal, allowing the patient to go about her household duties in

comfort.

Having used this instrument at the Women's Hospital in this city and in private practice, he had obtained excellent results from it, but had thought a modification advisable, and had brought some of the improved instru-ments with him. The tube he had made longer, so as to extend outside the vulvar opening, and so arranged that all drainage passed outside. These are now used at the Women's Hospital with admirable results.

He spoke of a case of colpo-cystotomy, where there was loss of urethral tissue from specific ulceration, and from the constant dribbling there was much superficial irritation of the parts around. After inserting this instrument the patient declared herself to be more comfortable than she had been for three years. As soon as the excoriations heal, a plastic operation will be performed to restore the urethra.

It is not necessary to use a winged catheter to keep the wound open. The reason why we have a permanent vesico-vaginal fistula resulting is from loss of substance after labor, or from sloughing and ulceration; the opening cannot close because it cannot draw upon the surrounding tissues. He would recommend, instead of the winged catheter, the self-restraining catheter of Dr. Goodman, to which is attached a long tube going to the urinal.

In reference to the removal of stone from the bladder, there are several methods of operating. Dr. Anna Broomall, physician in charge of the Women's Hospital of Philadelphia, recently removed a large stone by colpo-cystotomy and perforation, after expo-sure of its surface, by a diamond drill rapidly rotated by Bonwill's dental engine (reported in American Journal of Medical Sciences for January, 1879, p. 143). There was not the slightest contusion or injury to the bladder from the use of the drill, which, moving at the rate of ten thousand revolutions per minute, pierced the stone like a piece of wax. This method is entirely unique, and likely to supersede all others in removing a large calculus from the female bladder. The slightest pressure sufficed to perforate the stone in different directions, until it could easily be broken into fragments by a small pair of bone forceps, and extracted through the small opening by which its surface was exposed. It weighed nearly five ounces. At the time of operation the patient was steadily failing, and, although no shock was experienced from the operation, she died in ten days from a large abscess in the kidney. The bladder-surface was found to have been absolutely free from injury or contusion.

Dr. H. Lenox Hodge, in reply, said that if any one would test the relative merits of the "knee-elbow" position and the "breech-back" position of the Germans, he would soon become convinced of the merits of the latter. It is not simply a position on the back, but the breech is so elevated, by strongly flexing the thighs, that it rises above the abdomen, and the vulva is directed upward towards the ceiling. The pressure of the viscera brings the vaginal surface of the urethra to the orifice of the vagina, and it can be operated upon almost as easily as if it were on the exterior of the body. In the knee-elbow position, the distention of the vagina with air draws the parts away from the operator into the interior of the body. This renders the employment of the knife more difficult, and the use of the cautery more dangerous. Dr. Wilson, of Baltimore, in using the cautery in the kneeelbow position for cancer of the uterus, found it necessary to employ a hollow cylinder of wood to protect the surrounding parts. The breech-back position of the German professor Simon has all the advantages of the kneeelbow position of Dr. Sims, without its disadvantages.

As regards the knife and the thermo-cautery, each is best adapted to different conditions. When it is desirable to have the wound quickly

closed, use the knife; when it is necessary to keep it open for a long time, use the cautery. The sloughing caused by the cautery tends to keep the wound open. It is a great advantage, when possible, to do without any foreign body in the wound. In cases of cystitis, the presence of even the beautiful instrument just exhibited by Dr. Smith must cause additional irritation.

Metallic catheters have some advantages over the flexible, but after operations and in bad cases of irritable bladder the soft catheter is more easily borne and causes less irritation. In the male, this has been strongly insisted upon by Sir Henry Thompson.

The laying open of the whole urethra is not recommended as an ordinary practice. It was only done in one case, which was

exceptional.

The use of the drill for the breaking of stone, as lately done by Dr. Broomall, is new. It is a beautiful mechanical instrument. To break a stone so large as to weigh five ounces by any other instrument would be almost impossible. Any ordinary-sized stone, however, can easily be broken by the ordinary lithotrites without any injury to the bladder.

PATHOLOGICAL SOCIETY OF PHILADEL-PHIA.

THURSDAY EVENING, MARCH 27, 1879.

THE PRESIDENT, DR. H. LENOX HODGE, in the chair.

Scirrhus of the male breast. Presented by Dr. S. W. Gross.

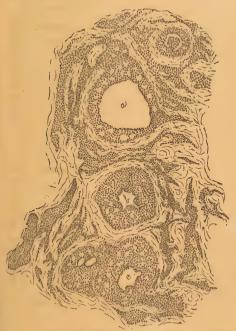
A GERMAN, 59 years of age, first noticed, a year ago, a firm swelling of the right breast, which gradually but painlessly increased in size until it formed a densely-hard nodular tumor, which measured upwards of an inch in diameter, and projected about six lines above the surface. The skin was red and excoriated, and covered, for the most part, with a crust, from the application of a salve, but the nipple was not retracted. In the centre of the axilla were two glands, closely connected with each other, which were first detected about six weeks ago. He was a small, muscular, healthy subject, and there was no history of cancer in his family.

The diseased structures were removed by Professor Gross, on the 4th of March, 1879. The entire mamma was converted into a lenticular tumor, an inch and a quarter in length by three-fourths of an inch in its greatest thickness, the cut surfaces of which were concave from above downwards, and of a delicate rosaceous-white tint, traversed by nacreous white bands. The larger lymphatic gland was elastic, and three-quarters of an inch in diameter. Its capsule was very vascular, and its substance was grayish-white, and mottled with blood extravasations and yellowish-white

granular points. The smaller gland was densely hard, of a whitish hue, and about

one-third of an inch in diameter,

Examination of frozen and stained sections disclosed that the connective-tissue framework of the mamma was infiltrated by small, round cells, and pervaded by variously-shaped, simple or branched, solid cell-cylinders, which. on transverse section, looked like choked ducts; so that the growth is to be classed as a tubular carcinoma. Although the cells, in situ, could not be distinguished from white blood-corpuscles or the ordinary products of connective-tissue hyperplasia, scrapings of the cut surfaces of the tumor proved them to be polymorphous, and of an epithelial type. In addition to these appearances, there were many enlarged and deformed acini, more or less closely packed with small cells of the same character, the undermost layer of which. however, was columnar, and rested upon the thickened membrana propria, the endothelial cells of which were increased in size and number. Immediately adjacent to some acini, and entirely distinct from them, were epithelial plugs; around others the plugs were encroaching upon the acini; while in others, at one or more points, the membrana propria had disappeared, and the cells of the acini were prolonging themselves into the surrounding lymph spaces, to fuse with the mobile cells



180 reduced one-half.

contained in them. These appearances are shown in the drawing, for which I am indebted to Dr. E. O. Shakespeare, a, b, and c representing three enlarged and more or less

closely packed acini, from the upper and lower of which the epithelium is extending itself into the lymph spaces, as may be seen at the inferior circumference, to the right. The smaller bodies represent solid cell-cylinders, which are the outgrowths of other acini, while the cells themselves are merely represented by their stained nuclei. Whether the morbid process originated within the acini, and the cell-cylinders were to be regarded as deformed acini prolonged into the lymph spaces, or whether, on the other hand, there was simultaneous heteroplasia of the connective-tissue corpuscles and of the glandular epithelium, the products of which subsequently united through the disappearance or destruction of the membrana propria, was not easy of de-termination. On the whole, however, I am disposed to regard the neoplasm as being of epithelial origin.

The larger lymphatic gland, in addition to being the seat of irritative changes, was, for the most part, converted into an exquisite carcinomatous structure of the ordinary type, as indicated by the formation of new connective tissue, which enclosed ovoid or roundish spaces filled with epithelial cells. In the smaller gland it appeared as if the structure of the primary growth was reproduced, as the cell-accumulations were mainly tubular or cylin-

drical

Records of scirrhus of the male breast are so rare that I may be excused for referring to two cases in which the minute appearances are detailed. In one from the practice of Wagstaffe,-and it is the more interesting, as both mammæ of a man of 61 years were affected,-Dr. Creighton, + who studied the growths, describes the firmer one as being composed solely of greatly-enlarged and deformed acini, filled with polyhedric or normal epithelium, and contained in a coarse fibrous or chronic inflammation stroma, while the softer one was undergoing caseation of detached cells within the acini. In the second example, reported by Wood,‡ the structure was that of ordinary carcinoma, the alveoli being filled with large, irregular-shaped cells; but it differed from the specimens just described, in that the vessels of the stroma projected as highly-vascular buds or villous processes into many of the alveoli, which were also the seat of blood-extravasations through rupture of the vessels. It was removed from a gentleman 60 years of age, and had been the source of occasional bloody discharge from the nipple.

It will be observed that these three illustrations of carcinoma of the male mamma are very unlike in their minute characters. That examined by myself is a true scirrhous, fibrous, or tubular growth, and corresponds to the

<sup>\*</sup> Trans. Path. Soc. London, vol. xxvii. p. 234. † Ibid., and Contributions to the Physiology and Pathology of the Breast, p. 145. ‡ Trans. Path. Soc. London, vol. xxv. p. 223.

ordinary type of the affection. The specimen of Wagstaffe was one of acinous tumor, and was peculiar in representing a purely hyperplastic process, as the enlarged acini were filled with normal epithelium, through which it might rather be regarded as an adenoma; while that of Wood was a telangiectatic carcinoma, which is synonymous with the erectile or hematoid variety of Cornil and Ranvier: but it is, so far as I am aware, unique, in that the vascular tufts were associated with hard instead of with soft or medullary carci-

It is possible that these cases represent different stages of development, and that they afford a clue to the point of origin of carcinoma of the breast. In that of Wagstaffe, the changes were limited to simple multiplication of normal epithelial cells, with enlargement and deformity of the acini. In my own case, which, in parts, may be said to represent the second stage, the dilated acini were filled with atypical cells, and they were evidently extending themselves as tubular prolongations into the lymph spaces. In the example of Wood the metamorphosis was complete, the alveolar structure being due to the fusion of the epithelial cells of the acini with the smallcelled infiltrate of the periacinous connective

Scirrhus of the male mamma is so infrequent when compared with the female breast, the proportion, according to Paget's and my own observations, being as two to ninetyeight,-that I take this opportunity of showing you an example of the affection in this man, who is 63 years of age. About five years ago his attention was attracted to the nipple by its being the seat of itching, when he scratched off a thick crust of epidermis, which he describes as resembling a pearl button. scab reformed, and was removed from time to time, but the nipple beneath it does not appear to have been sore or red. Last June he was struck over the breast, and two months subsequently he accidentally found that the nipple was excoriated. Four months ago he noticed that the mamma was nearly or quite as large as it is now; but he observed that the axillary glands were enlarged about eight weeks before he received the blow. The left mammary gland is converted into a hard discoid tumor an inch and a quarter in diameter, and its centre is occupied by a superficial ulcer, which has destroyed the nipple, and measures five-eighths of an inch transversely and three-eighths of an inch vertically. Its lower edge is inverted, puckered, and hard; its base is partly covered by a soft crust; and the skin is elevated into slight ridges, which radiate from its circumference. At a distance of two inches from the tumor there is an enlarged lymphatic gland on the side of the chest, over the fifth rib, while there is a large cluster of indurated glands high up in the axilla. His general health is excellent, the growth has never caused him the slightest pain or other inconvenience, and there is no history of carcinoma in his family.

This case is of great interest, as it elucidates a practical point in the pathogenesis of carcinoma of the mamma, -namely, that it is often preceded by and attributable to certain chronic affections of the nipple and areola, to which attention was first directed by Sir James Paget,\* and has since been observed by Busch,† of Bonn. The cases of Paget, fifteen in number, occurred in women, varying in age from 40 to 60 years, in the majority of which the nipple or areola was the seat of an intensely red, very finely granular raw surface, discharging a copious, clear, yellowish, viscid fluid. and attended with a tingling, itching, or burning sensation. In some the eruption presented the ordinary characters of chronic eczema. while in others it was dry like psoriasis. In none of the cases was the appearance of the carcinoma delayed beyond two years, and it usually followed within one year; while the development of the disease was not primarily in the skin, but in the substance of the gland. beneath or not far from the affected skin, and always with a clear interval of apparently

healthy tissue. With the view of determining whether there is any real connection between chronic eczema of the nipple and areola and carcinoma, Mr. Butlin‡ examined two breasts which were the seat of the former disease, and found that, in addition to the ordinary changes produced in the skin by eczema, the ducts were widely distended, and contained, frequently, large masses of squamous epithelium, and that the connective tissue was infiltrated with small cells. In an induration, which existed in one of the breasts, the acini were also found to be enlarged and filled with epithelium. Although there was no carcinoma in either case, these facts indicate the commencement of morbid processes which lead to the development of that affection. Continuing his investigations, Mr. Butlin, a year subsequently, described the minute anatomy of two instances of scirrhus of the mamma which were preceded by eczema. In both, the tissues between the neoplasm and the areola were somewhat indurated, and the appearances were the same as were present in the former cases, with the addition, in one, of cell-nests in the thickened portions of the areola and nipple, and of much greater enlargement of the acini and ducts in the centre of the carcinoma than in the previous cases, so that they had become confluent, and their contents had made their way into the surrounding tissues." these four cases Mr. Butlin concludes that eczema is an exciting cause of scirrhus through primary heteroplasia of the epithelium of the

<sup>\*</sup>St. Bartholomew's Hospital Reports, vol. x. p. 87. † Langenbeck's Archiv, vol. xxi. p. 687. ‡ Med.-Chir. Trans., vol. lix. p. 107. ¿ Ibid., vol. lx., p. 153.

ducts, along which the disease travels to reach the acini and smaller canals.

Adenoid fibroma of the breast. Presented by Dr. S. W. GROSS.

Dr. S. W. Gross exhibited a specimen of adenoid fibroma, which was removed by Dr. W. G. Porter from a lady 26 years of age, who first noticed it as a small lump, at the upper and inner circumference of the mamma, eight years previously. She had been married only a few months, and thought that its increase had been rapid during that time. It was freely movable, and painless throughout, and the skin and nipple were normal.

The tumor was flattened and ovoidal in

form, and measured three inches and a half in length, three in breadth, and one inch and a half in thickness. It was lobulated, uniformly firm and somewhat elastic, enclosed in a thin capsule, and presented, on section, a coarse fibrous appearance, with a few dilated ducts. Attached to it, by a rather broad pedicle, was a second growth, of the volume of a

small walnut.

The microscope revealed an abundant, for the most part mature, wavy, fibrous tissue, throughout which were interspersed numerous acini and ducts filled with epithelium. Some of them were becoming converted into cysts, through dilatation of their walls and

mucoid transformation of the cells.

In his remarks on this specimen, Dr. Gross stated that minute examination of twentyeight fibromas and sarcomas of the mamma had convinced him that, while the majority of the connective-tissue neoplasms contained lacteal glands, so that they are mostly mixed growths, the amount of persisting glandular tissue is proportionate to the chronicity of the tumor. In this specimen, for example, the acini were abundant, while in the fibroma exhibited by Dr. Keen during the past winter, which had attained a circumference of fifteen inches in six months, a large section disclosed only one enlarged and deformed lobule and a few dilated ducts.

Case of aspergillus glaucus in both auditory canals of a woman. Presented by Dr. CHARLES H. BURNETT.

The specimen of fungus—the aspergillus glaucus or flavescens—which I present this evening was removed, February 20, 1879, from the left ear of a lady 30 years old, both of whose ears were affected by the fungus.

It may be of interest to state that this patient was afflicted, three years ago, by the growth of aspergillus nigricans in both ears.

The patient stated that during a month and more, previous to her visit to me last month, both ears had itched and burned very much, that she had scratched the canals in spite of herself, and that at last a watery discharge had come from them. They began to feel stuffed up; the hearing became dulled; the auricles had become somewhat tumid and red, probably from manipulation; and there

had been one or two small furuncles in the canal of the left ear. The annoyance had made the patient nervous and depressed, and there were some dyspeptic symptoms.

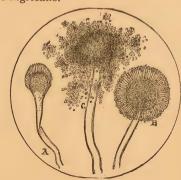
A physician in Asbury Park, where she resides, had prescribed cajeput oil and other oils for her ears, but the more oleaginous matter she had put into her ears the worse

they became.

Upon inspection with the aural mirror and speculum, both canals were seen to be plugged with a dark grayish mass. By means of the syringe a glove-finger cast of each canal was washed out, one of which I show you in this small vial. Its peculiar shape has been destroyed to a great degree, on account of tearing it to get microscopic specimens from its deepest parts. The fungus was found growing in both auditory canals, and the skin lining the latter was found greatly tumefied and inflamed, and at spots ulcerated. history of the case showed that there had been a seborrhæic condition of the ears before the fungus began to grow in them.

The symptoms of the growth of this fungus in the ear have already been detailed by me, in a paper presented to you last spring. My chief object in laying this specimen before you is the exhibition to the Society of this rare form of aspergillus. In twenty-two cases of aspergillus in the ear, this is the first instance of the aspergillus glaucus I have met, the other twenty-one cases being of the asper-

gillus nigricans.



In the woodcut I herewith show you, the latter fungus—the aspergillus nigricans (b) is seen to be the larger, and its receptacu-lum is evenly surrounded by its sterigmata; whereas in the aspergillus glaucus (a), the variety exhibited this evening, the receptacu-lum is bare on its lower fifth and the entire head is smaller than the aspergillus nigricans.

It is also worthy of note that the receptaculum in this variety is pear-shaped, while in the aspergillus nigricans the receptaculum is spherical, being also marked at its point of juncture with the stem by a constriction. These diagnostic points are so sharp that no difficulty need be experienced in differentiating one form of the fungus from another.

Whether this form shown you to-night excites a severer and more obstinate inflammation in the ears than the aspergillus nigricans vet remains to be shown. Its occurrence is much less frequent than that of the aspergillus

Case of ulcerated and fungous cystic tubular adenoma of the female breast. Presented by Dr. M. LONGSTRETH. Notes by Dr. H.

Mary W., admitted January 10, 1879, under the care of Dr. Morton, in the Pennsylvania Hospital. Single; æt. 50; dressmaker; born in Ireland.

Her parents were healthy, and lived to an advanced age. A sister had a tumor of the breast, which was "burnt out with caustic," and she has had no return of the disease since. A brother has a "sore" on the cheek.

About eighteen years ago she first noticed a swelling of her left breast; this remained without appreciable increase in size, or without giving her any inconvenience, until seven or eight years ago. It then became much swollen after a course of sea-bathing. In four months it had swollen to a large size, and in about a year it burst and discharged a brownish watery fluid. The swelling then entirely disappeared, and during four months she was entirely free from any swelling of the breast. Four months later, however, another swelling occurred immediately beneath the seat of the previous swelling; it was also painless.

For about six years there was a constant slight discharge from the swelling. About four months previous to admission the swelling increased very rapidly, and the discharge had been much freer, and had become much

more offensive.

According to her statement, it had not bled much except when she picked it, which she had done with the idea that free bleeding lessened the offensive odor. She has lost flesh and appetite during the last three or four months only. Has always been pale and thin.

Upon admission the patient was pale. There was a tumor as large as a child's head hanging from the outer side of left breast, moderately soft and somewhat lobulated. The surface was ulcerated, blackened, covered with black clotted blood, and purulent matter exuded from the surface. The lymphatic glands of neck and axilla seemed to be entirely free from enlargement. The odor exhaled from the mass was very offensive. On pressure, a bloody, watery fluid exuded in jets. The mass was movable on the thoracic wall.

January 11, Dr. Morton removed the mass by a curvilinear incision about six inches in length. There was pretty free hemorrhage after the removal of the tumor, requiring six ligatures to control it. After the operation there was considerable pain. In the evening, temperature 101.5° F.; pulse 106.

The wound healed rapidly by adhesion; there was very little discharge. She was dis-

charged, February 6, 1879, well.

The tumor, when handed to me after removal for examination, had a very offensive odor, due to the decomposing blood and matters contained in it. Its surface was uneven and nodulated, and of a black color; by slight pressure, there flowed from it a thick bloody fluid. The greater part of the surface showed the results of ulceration, and was covered by thick, dry crusts of tissues. wards the base of the tumor, the skin covering it had a purplish color; at the border, towards the ulcerated part of the tumor, the skin was elevated by cysts or sinuses beneath it filled with blood, which, by pressure, could be emptied, immediately refilling when the finger was removed. The diameter of the tumor at the level of the chest-wall was about three inches, whilst the fungous mass at a level two inches higher (about one-third of the distance to its summit) had a diameter of about six inches. The depth of the tumor, from its most prominent point to its base, was nearly six inches. The anterior surface was flat-tened, but irregular, due to ulcerative de-struction of the part, thus giving the mass the form of an oblong flattened sphere, the greatest diameter being transverse.

The fungoid mass, therefore, overhung and partly concealed the skin covering the deeper parts of the tumor. On raising up the mass, a deep pit large enough to hold the point of the index-finger was found on the inner side, concealed in the fold between the tumor and the skin. This depression was found to be due to the retraction of the nipple. The usual coloration of the nipple and its areola was lost in the purplish hue of the skin at this part of

the growth.

On making a deep section of the tumor, carried from its most projecting point nearly to the base, tissues of varying appearance were brought to view. First, the surface was found to consist, in parts, of skin, dead, dry, infiltrated, and blackened by blood-coloring matters; other parts of the skin covering the mass had ulcerated and been removed, the crust covering the deeper parts consisting of dried tissues equally blood-stained and black. Beneath this surface were found cavities in the tissues filled with blood-colored fluid; the size of the cavities varied from minute pinhead-sized cysts to large openings capable of holding a small walnut; the contents of these cavities varied somewhat in consistence, but were thin and serous, quickly flowing away on section.

Deeper, the cysts were large in size, but were separated by thicker bands or masses of tissue. More superficially, the walls of the cysts were thin and membranous; deeper, the tissues surrounding the cavities were firm and flesh-like, and, like all the tissues in this part of the tumor, stained of a deep-red color.

On reaching the lower third of the section. tissues of an opaque-white color were reached. which, on the surface of the section, appeared like gland tissue; from them exuded a thin, semi-transparent, whitish fluid. The consistence of this part was about that of the tissue found in normal mammary gland, but somewhat more elastic. There was no distinct demarcation between the cystic portion and that found lower in the section; the consistence and the color of the two parts were entirely unlike, but no capsule or fibrous band separated them distinctly.

On inspection of the base of the tumor. some adipose and muscular tissues were found covering the mass; they were of normal appearance. Resting on them were found the lobulated masses of the tumor, having the same color and consistence as the tissue composing the deeper parts of the section

above described.

These lobules of the tumor were covered and separated from the adjacent lobules by a thin, shining, fibrous capsule, which was not adherent (or only loosely so) to the sub-mammary tissues. Several large vascular trunks were seen penetrating its base, and taking a course especially towards the outer or fungoid portion of the mass.

Sections made with the freezing microtome, without hardening, from different portions of the neoplasm, were examined by Dr. S. W. Gross, to whom I am indebted for the follow-

ing report:
"The entire lower third of the tumor was composed partly of dilated and deformed and. here and there, confluent acini, the mem-brana propria of which was perfect, and lined with regular columnar epithelium, and packed with polymorphous cells, which had undergone fatty degeneration at the centre of some and mucoid changes at the centre of others. In a few there were vegetations, made up of delicate connective tissue, and covered with columnar epithelium. In addition to the changes in the size and form of the acini, and the proliferation of their epithelium, excessively elongated, but only moderately wide, tubules pervaded the sections to such an extent that they greatly preponderated throughout the entire growth. Some were fusiform, but the majority were irregular in their outline, being alternately contracted and dilated, like a row of ovoid beads. They pursued, as a rule, a parallel course, but they now and then divided and intercommunicated, and some at several points were in direct connection with the altered acini, of which, indeed, they were merely outgrowths or prolongations, so that from one acinus I counted nine offshoots. They all retained their proper membrane invested by columnar epithelium, and the majority preserved their lumen throughout, although they frequently terminated in attenuated solid processes, which not uncommonly were curved or turned

upon themselves. The intertubular connective tissue was very sparse in quantity, so much so, indeed, that on transverse section the ducts were so closely crowded together that their limiting membranes appeared to be in contact with one another. There were also a few areas of the normal, dense, fibrous tissue, into which the ducts were extending, Sections of the 'fleshy part of the fungus' were so obscured by a small-cell infiltration that little else was to be observed, save enlarged ducts and acini which had undergone cystic changes; while a section of the 'skin near the ulcerated margin of the tumor' dis-closed that it was the seat of chronic inflammatory changes. From these considerations I would classify the neoplasm as a cystic tubular adenoma," a form of tumor which is so rare that the only other example on record is that described by Billroth.\*

# REVIEWS AND BOOK NOTICES.

HANDBOOK OF DIAGNOSIS AND TREATMENT OF DISEASES OF THE THROAT AND NASAL PASSAGES. By CARL SEILER, M.D. Thirty-Five Illustrations. Philadelphia, Henry C. Lea, 1879, pp. 156.

The intention of the author, expressed in the preface, to make this little book "serve as a guide to students of laryngoscopy in acquiring the skill requisite to the successful diagnosis and treatment of diseases of the larynx and nasopharynx," has been most ably carried out. Cleanliness in the management of instruments used in the examination of patients is enjoined from beginning to end, and if the student learns only this lesson he will have learned much. The ordinary diseases of the larynx and nasopharynx are described in terse sentences, and the treatment recommended is both rational and abundant. Dr. Seiler approves of the use of the nasal douche, when properly employed, and, like many others who have availed themselves of this valuable instrument at the right time and in the right way, he has never met with any bad results: on the contrary, he has always accomplished some good, if not entire relief, for his patients by its use. He gives minute directions for its application. In the administration of iodide of potash the author has found it highly advantageous to combine with it the bromide of potash, "because the one seems to enhance and at the same time control the action of the other.'

Seiler's uvula scissors seem unequalled by any others for conveniently amputating part or all of the uvula. The entire book is admirably illustrated and beautifully printed on very fine paper, its entire literary appearance

<sup>\*</sup> Langenbeck's Archiv, vol. vii. p. 861.

being in keeping with the well-known taste and care of the publisher. We most heartily commend this book as showing sound judgment in practice and perfect familiarity with the literature of the specialty it so ably epitomizes.

C. H. B.

NEW AND ORIGINAL THEORIES OF THE GREAT PHYSICAL FORCES. By HENRY RAYMOND ROGERS, M.D. Published by the author. MDCCCLXXVIII., 12mo, pp. 107.

In this work the author endeavors to set forth his own theories of the "Great Physical Forces." As these theories are totally different from those generally accepted, and as the argument involves the demolition—scientifically speaking—of such authorities as Bruno, Kant, Laplace, and a few others, it is rather "hard lines" to have it done in a hundred duodecimo pages of open type. It is reassuring, however, to learn from the author's preface that "he claims not infallibility."

CLINICAL REMARKS ON GLEET: ITS CAUSES AND TREATMENT. Delivered in the Aberdeen Royal Infirmary by J. C. OGILVIE WILL, M.D. London, J. & A. Churchill, 1879, 8vo, pp. 31.

Within the brief compass of 31 pages the author attempts to bring together, in a short and concise form, the more modern views regarding gleet and its treatment as given by recent authorities on the subject, more especially Van Buren and Keyes, Bumstead, Berkeley Hill, Ch. Phillips, and Otis. No originality is claimed, but the writer presents the views of these distinguished authors in a clear and concise manner. He has added also a lithographic plate giving drawings of some of the chief instruments of modern device for use in the treatment of gleet.

THE VISITING LIST OR POCKET DOSE-BOOK.
Published by the Metric Club, 188 Clark
Street, Chicago, 1879, 16mo, pp. 25.

A missionary effort on the part of the metric brotherhood, this booklet is said by those who put it forth to render the use of the metric system easy and attractive even to old practitioners. It contains a list of several hundred drugs and preparations, with their ordinary and their metric doses arranged in parallel columns; also a table for the conversion of one system into the other, and a page devoted to the delineation of the centigrade and Fahrenheit thermometric scales, together with a scale of millimetres. The latter alone is worth the price of the whole volume, which is "sent free on the receipt of six cents in postage."

POCKET THERAPEUTICS AND DOSE-BOOK, ETC. By Morse Stewart, Jr., B.A., M.D. Detroit, Emil Scholer, printer and binder, 1878, 32mo, pp. 101.

There are few subjects connected with symptomatology, therapeutics, toxicology, and

the allied branches of medicine which are not touched upon in this miniature volume. It is unnecessary to say that the topics are treated very briefly. This is the sort of a vade-mecum which one might take on a balloon excursion, where any emergency might occur, but where only the lightest weight could be carried. We regret to see nothing about obstetrics. A line or perhaps two on the various procedures in midwifery would make the volume complete.

AMERICAN HEALTH PRIMERS.—LONG LIFE, AND HOW TO REACH IT. By JOSEPH G. RICHARDSON, M.D. Philadelphia, Lindsay & Blakiston, 1879, 16mo, pp. 160.

Dr. Richardson's subject may be said to be of universal interest. We all want to attain the object; how to do it is well worth finding Dr. Richardson treats of the causes of disease and how these may be avoided, contagion and the means of escaping it, clothing, pure air and water, baths, the houses we live in,-or ought to,-food and drink, exercise, sleep, the hygiene of the brain, and, after a brief chapter on parasites, concludes by describing the proper method of growing old gracefully and with comfort. This is a good deal to get into one small volume, and it is needless to say that the subject is treated from a popular stand-point, though in a properly professional spirit.

POSOLOGICAL TABLE: INCLUDING ALL THE OFFICINAL AND THE MOST FREQUENTLY EMPLOYED UNOFFICINAL PREPARATIONS. By CHARLES RICE, chemist, Department of Public Charities and Correction, New York, etc. Revised and approved by members of the Medical Boards of Bellevue and Charity Hospitals. New York, William Wood & Co., 1879, 16mo, pp. 96.

An excellent manual for the druggist's counter or the physician's desk, containing a list of several thousand drugs and preparations, with a few facts in each case regarding preparation, solubility, etc., and adding the dose; with various signs indicating internal or external use, warning against increasing the quantity, etc.

# GLEANINGS FROM EXCHANGES.

HYDRATE OF CHLORAL AND BROMIDE OF POTASSIUM ENEMATA IN THE VOMITING OF PREGNANCY.—Dr. D. B. Simmons, of Yokohama, again calls attention to this method of treatment. Further experience still more impresses him with its usefulness. The amount of each drug and the frequency of its administration depend on individual susceptibility to its influence, but in general the dose of twenty to thirty grains of each dissolved in gum-water may be injected, at short intervals, until a moderate degree of narcotism is produced.—American Journal of Obstetrics, April, 1879.

PROPHYLAXIS OF CHOLERA INFANTUM.—Dr. Miller urges, above all, the necessity of keeping infants cool. The cool bath should be employed twice a day always, and during the hot season oftener. If the child is unaccustomed to bathing, frequent sponging with cold water may be practised. The house should be kept as cool as possible, and the child should stay in the coolest room. If the child is threatened or already sick, and its room is not cool, make it cool with pails or tubs of cold water, or even with ice; the temperature can be materially lowered in this way. It is to be remembered that cool air reaches the lungs, which cool water cannot do, and the cooling process is much favored by the peculiar anatomical provisions for bringing the air into almost actual contact with the blood-current.—American Journal of Obstetrics, April, 1870.

Obstinate Case of Hiccough cured by the Passage of an (Esophageal Sound.—Dr. E. Barré (L'Union Méd.) had a man of 45 under his care, who, as the result of emotion, suffered from a continual and insupportable hiccough. Ether, the bromides, morphia, at first gave temporary relief, only to fail altogether after a time. His general health had failed considerably in consequence of the continual disturbance, when he consulted Dr. Barré, who prescribed at first chloroform, then compression, without effect. At last, on one occasion, he passed an œsophageal tube. Immediately the patient fainted, but soon recovered, and, by repeated introduction of the sound during a few weeks, was completely cured.—Chicago Medical Journal

and Examiner, May, 1879.

The Properties of Human Intestinal Juice.—Dr. Demant's experiments lead him to the following conclusions: I. Human intestinal juice is a clear, thin liquid, of a strong alkaline reaction. 2. The total quantity is not large. The secretion is increased during digestion, but during the night is almost arrested. It is not affected in any way by purgatives (Carlsbad salts, etc.). 3. It does not contain any ferment capable of digesting albumen, and has no action whatever on any kind of protein. 4. It converts starch into grape-sugar, and also changes cane-into grape-sugar, but leaves inulin (which has been recommended for diabetic patients instead of bread) unaltered. 5. It emulsifies fats containing free fatty acids, but not neutral fats in which those acids are combined with glycerine.—Cbl. f. Med. Wissen.; Med. Times and Gaz., vol. i., 1870, p. 324.

and Gaz., vol. i., 1879, p. 324.

PRELIMINARY TRACHEOTOMY IN EXCISION OF THE TONGUE.—Mr. Barker advises this to avoid the risk of the passage of blood down the trachea. He alludes to two cases in which this proved fatal, but in the case brought forward the tracheal wound was purposely kept open in order to avoid, as far as possible, the risk of the inhalation of septic matters into

the lung during the earlier part of the aftertreatment. This is a real danger. Such operations have been followed by death, the result of septic pneumonia, or even gangrene of the lung. The case brought forward in illustration was one of successful extirpation of the tongue in a man, of 49, suffering from epithelioma.—Clinical Society, Lancet, vol. i., 1879, p. 479.

RECOVERY AFTER EVACUATION OF A TRAU-MATIC ABSCESS IN BRAIN BY TREPHINING AND INCISION .-- Mr. J. W. Hulke gives the case of a boy who, striking his head against a fence, grazed it and was momentarily stunned. He continued to work for seven weeks, during which time he had more or less pain in the forehead; then retching and hemiplegia su-pervened. The frontal bone was trephined at the seat of injury. A small fissure was recognized in its outer table. The dura mater seemed healthy. An aspirator trocar being pushed into the brain, pus rose into the syringe. The abscess was opened through the membranes with a knife, and in all about three drachms of pus were let out. The patient recovered, but lost the sight of both eyes by optic neuritis. Mr. Hulke insists upon the value of hemiplegia, as significant of dis-British Medical Journal, vol. i., 1879, p. 388.
INTRAVENOUS INJECTION OF AMMONIA.—

Intravenous Injection of Ammonia.—Dr. Gasper Griswold communicates the results of his investigations as follows. I. The intravenous injection of ammonia is a prompt and powerful means of stimulation, acting efficiently where other measures are of no avail.

2. No bad consequences follow its employment. The cases given are very striking as to the use of this remedy in desperate cases. The amount was half a drachm to a drachm of the officinal aqua ammoniæ, containing ten per cent. of the gas, mixed with an equal part of water, and injected into the radial, median, cephalic, or other veins.—N. Y. Med. Record, June 7, 1879.

JABORANDI IN WHOOPING-COUGH.—Dr. De Cailhol being called to see a stout boy five years of age, who was in a violent paroxysm of whooping-cough, with dry skin, a pulse of 140, and a temperature of 104°, gave the following treatment. Into two ounces of water he put sixty drops of the fluid extract of jaborandi, and of this a teaspoonful (four drops of the fluid extract) was given every fifteen minutes until one-half was gone. An hour or so later Dr. De Cailhol revisited his little patient and found him perspiring freely. He had already vomited large quantities of mucus, and was still vomiting; temperature and pulse quite normal. The doctor remained for nearly an hour with the child on account of the vomiting being so persistent, and during that time he did not cough once. When he left, the child was sleeping soundly. The next day he was much better, and made a rapid recovery .- St. Louis Clin. Record, May, 1879.

Hypodermic Use of Colchicine in Rheu-MATISM.—The solubility of colchicine in water renders it very applicable for hypodermic use. Dr. Badia, a Spanish physician, has communicated a number of successful results of its employment in this way in chronic rheuma-· tism, and these have induced Dr. Heyfelder, of St. Petersburg, to try it in a series of cases, with results, on the whole, gratifying. rheumatic joint affections, and particularly in ischiagria, two milligrammes (1/32 gr.) were injected in fifteen drops of water, and the effect was remarkable in lessening the pain and increasing the mobility of the joint. The first result of the injection is a severe burning pain, which rarely lasts over an hour. In some cases there was local tenderness, and occasionally local inflammatory reaction of varying degrees at the place of injection. Increased diuresis and strangury were noticed in a few cases. In persons with sensitive skin, caution must be used and the dose diminished. When local inflammatory phenomena are present, the remedy should be discontinued or applied at some distance. -N. Y. Med. Four., 1879, p. 661; from Berlin. Klin. Wochens.

REMEDIES FOR HICCUP.—According to the Lyon Medicale, Dr. Grellety has observed that hiccup in children was immediately stopped by giving them a lump of sugar saturated with table vinegar. The same remedy was tried on adults, with similar instantaneous success.

### MISCELLANY.

PHYSICAL EXAMINATION OF SEAMEN OF THE MERCANTILE MARINE.—By a recent circular of the Marine Hospital Service, information is conveyed that, upon application of any United States Shipping Commissioner, or of the master or owner of any vessel in the foreign trade or passenger steamer engaged in the coasting trade, the medical officers of the Marine Hospital Service will examine, physically, any seaman, and give a certificate as to his fitness or otherwise. As a record of these examinations will be kept, this plan is likely to prove beneficial to science as well as to the merchant marine.

THE GENTLE VIVISECTIONIST is likely to find his pursuit rendered more difficult in Germany than it has been heretofore, since we learn from the Nation that anti-vivisection societies have been formed for the purpose of interfering with the practice. We learn also, however, that the "hypocritical vivisector" has thus far eluded pursuit, by feigning hu-manitarianism and getting himself chosen president of the "anti-cruelty societies."

DR. TILBURY Fox, the distinguished dermatologist, died, quite suddenly, in Paris, a few weeks since. It is said his practice, which was entirely confined to diseases of the skin, yielded him between twenty and thirty thousand dollars a year.

THE Medical Service of the British Army has proved unequal to the demands made upon it by the various wars now in progress. No fewer than forty "volunteers" have been enlisted, at a pound a day, for the Zulu cam-

THE PLAGUE.—Intelligence has been received at St. Petersburg from Tiflis that a disease with terrible mortality is raging in ten

villages in the Caucasus.

Two English medical students recently committed suicide. The cause in both cases was excessive nervous tension resulting from overwork in preparing for examinations.

### OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY FROM JUNE 15 TO JUNE 28, 1879.

WOLVERTON, W. D., MAJOR AND SURGEON.—Granted leave of absence for four months. S. O. 140, A. G. O., June

O'REILLY, R. M., CAPTAIN AND ASSISTANT-SURGEON.— The leave of absence granted him from Headquarters, Department of the South, May 28, 1879, extended one month. S. O. 24, Division of the Atlantic, June 25,

DE HANNE, J. V., CAPTAIN AND ASSISTANT-SURGEON, Fort Concho, Texas.—Granted leave of absence for one month on Surgeon's certificate of disability, with permission to leave the Department. S. O. 123, Department of Texas, June 12, 1879.

FITZGERALD, J. A., CAPTAIN AND ASSISTANT-SURGEON.—
The sick-leave granted him in S. O. 42, February 20, 1879, from A. G. O., extended twelve months on Surgeon's certificate of disability. S. O. 147, A. G. O., June 23, 1879.

HALL, J. D., CAPTAIN AND ASSISTANT-SURGEON.—Relieved from assignment to duty at Fort Griffin, Texas, and to report to the Commanding Officer, Fort Concho, Texas, for duty as Post-Surgeon. S. O. 121, Department of Texas, June 10, 1879.

HAVARD, V., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.

—Assigned to duty as Post-Surgeon, Fort Johnston, N.
C., relieving Assistant-Surgeon B. G. Semig, who will
comply with S. O. 114, C. s., A. G. O. S. O. 95, Department of the South, June 16, 1879.

partment of the South, June 10, 1079.

Adair, Geo. W., First-Lieutenant and Assistant-Surgeon.—Granted leave of absence for two months and fifteen days. S. O. 145, A. G. O., June 20, 1879.

Wilcox, T. E., First-Lieutenant and Assistant-Surgeon.—Assigned to duty as Post-Surgeon, Boise Barracks, Idaho Territory. S. O. 64, Department of the Columbia Lune 5 1870. Columbia, June 5, 1879.

TURRILL, H. S., FIRST-LIBUTENANT AND ASSISTANT-SUR-GEON.—Granted leave of absence for two months. S. O. 148, A. G. O., June 24, 1879.

HALL, WILLIAM R., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—When relieved by Assistant-Surgeon Wil-cox, to report for duty to Major John Greene, First Cavalry, commanding troops in the field at Camp Win-field Scott, Kittias Valley, W. T. S. O. 64, c. s., De-partment of the Columbia.

partment of the Columbia.

Powell, J. L., First-Lieutenant and Assistant-SurGeon.—The order relieving him from duty at Fort Griffin,
Texas, and directing him to report at Department Headquarters for further orders, is suspended until further
orders. S. O. 130, Department of Texas, June 21, 1879.

Davis, William B., First-Lieutenant and AssistantSurgeon.—Temporarily detached from Fort Totten, to
repair to Fort Buford, and hold himself in readiness to
proceed to Fort Peck, for duty at the supply depot to be
established at that place. S. O. 64, Department of Dakota, June 15, 1879. kota, June 15, 1879.

YEOMANS, A. A., CAPTAIN AND ASSISTANT-SURGEON.—An Army Retiring Board having found him incapacitated for active service, granted leave of absence until further orders on account of disability. S. O. 141, A. G. O.,

# PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, JULY 19, 1879.

### ORIGINAL COMMUNICATIONS.

AN ANALYSIS OF THREE HUNDRED AND SIXTEEN CASES IN WHICH FOREIGN BODIES WERE LODGED IN THE BRAIN.

BY H. R. WHARTON, M.D.

Assistant to the Professor of Clinical Surgery in the University of Pennsylvania.

SIR BENJAMIN DRODIE, it then cases of musket-ball lodged in the IR BENJAMIN BRODIE, in analyzing brain, says, "In two cases of them the ball was extracted, and one patient recovered, while the other died. In the remaining eight cases the ball was allowed to remain; two of these patients died, while six recovered. Of the latter, one died several weeks afterwards, of inflammation of the brain, induced by excessive drinking, and another died in the course of the following year, from sunstroke." In the following collection of cases, more than thirty times the number analyzed by Brodie, the results are as follows: of the three hundred and sixteen cases, one hundred and sixty recovered, while one hundred and fifty-six died.

In one hundred and six cases the foreign body was removed, death following in thirty-four cases, recovery in seventy-two cases.

In two hundred and ten cases no attempt was made to remove the foreign body, death following in one hundred and twenty-two cases, recovery in eighty-eight cases. It should be here stated that some ten patients who recovered sufficiently to attend to their regular occupations, but ultimately died at periods varying from three to fifteen years from the effects of their injuries, have been classed as having recovered.

Considering the severity of the injury, the proportion of recoveries is large, but on examination of the cases it will be observed that many of the recoveries were not complete, the patients afterwards suffering from epilepsy, vertigo, impairment of mind, incapacity for physical exertion, paralysis, loss of sight and hearing. In one hundred and eleven of the cases of recovery the above-named symptoms were

wanting, while they were present in fortynine cases.

In the one hundred and eleven cases that recovered without bad symptoms, the foreign body was removed in fifty-six cases and allowed to remain in forty-five cases. The question of interference for removal of foreign bodies is one which has caused much discussion, but on which I think authorities are now generally agreed. In the following collection of cases the results of its removal were not only most satisfactory as regards recovery but also as regards the completeness of the recovery. There can be no doubt that the presence of the foreign body increases the gravity of the injury, and that when its position can be clearly located, and when its removal is not accompanied with too great a destruction of tissue, it should be attempted. The difficulty of locating the foreign body is seen to be great, for when it has once passed out of sight the surgeon has no means of discovering its position, except by the probe. Extreme care should be exercised in passing a probe along the track of a foreign body in a wound of this nature, as little force is required to cause the probe to pass through the unresisting brain structure in a course different from that taken by the vulnerating body, and the surgeon may add other wounds to an already most serious injury. On the other hand, where the body cannot be accurately located, all attempts to find it by frequent probing should be desisted from, for, as has been shown, a large number of cases have recovered where it has not been removed, and there is a possibility of its becoming encysted, and of recovery taking place in this way, or of life at least being prolonged.

I think that Prof. Thomas Longmore, in his article on trephining in injuries of the head, expresses the opinion of the best surgeons of the present day. He says, "If the site of lodgment of the projectile is obvious, it should be removed with as little disturbance as possible, but trephining for its extraction when the place of its lodgment is not definitely known, but where the projectile is only supposed by inference to be lodged in a particular spot beneath the cranium, is an unwarrantable operation."† The presence of the foreign

<sup>\*</sup> Works of Sir Benjamin Brodie, vol. iii. p. 82.

body in the brain in many cases excites inflammatory action, which may be either rapid or slow in its progress, sometimes destroying large amounts of brain-tissue That cerebefore the case ends fatally. bral abscess is a frequent cause of death is clearly shown by the fact that it was present in at least fifty-three of the fatal cases where post-mortem examinations were made; in many other cases the examination was made solely with reference to the location of the foreign body, and the condition of the surrounding tissues is not stated.

Apoplexy is also shown to be a cause of death in these injuries, but much less frequently than abscess. Pressure of the foreign body on the venous branches, interfering with the return of blood, causing effusion into the cavities of the brain, and this effusion by its pressure interfering with the function of the nerves which have their origin from the base of the brain, is also noted as a cause of death. Convulsions and coma, also resulting from this interference with the circulation of the blood in the brain, are frequently noted. A tendency to coma, it might be here stated, as in all head injuries, is a most unfavorable symptom, nearly every one of these cases in which it was marked proving fatal.

The presence of the foreign body in the brain seems to predispose to inflammatory action; in some cases of recovery where the foreign body remained in the brain, the cases progressed favorably until some cerebral excitement was experienced; five cases are recorded where death took place suddenly after excessive drinking, in one case during the excitement of a game of cards, in another after a slight injury of

the head.

Seven cases were complicated with hernia cerebri; three of these proved fatal,

four ending in recovery.

In quite a number of cases the foreign body remained in the brain for some time without causing any unfavorable symptoms, when suddenly cerebral symptoms were developed and death quickly followed. I think that the experiments of M. Flourens will help to explain these cases. introduced leaden bullets into the brains The balls were of rabbits and dogs. placed on different parts of the upper region of the encephalon and on the lobes of the cerebellum. The balls left to the action of their own weight penetrated by

degrees the substance of the brain, and ultimately stopped at the base of the cranium, the passage made by the balls healing after them.\* This fact that bodies were found to change their position may account for the sudden deaths in cases where their presence had previously occasioned little trouble. With regard to the fatality of injuries of different parts of the brain, authorities differ. Guthrie says that an injury of apparently equal extent is more dangerous in the forehead than on the side or middle of the head, and much less so on the back part than on the side. †

Brodie, on the other hand, says, "I have not been able to discover in the works that I have consulted a single instance of recovery from a wound of the posterior lobe of the cerebrum, cerebellum, or medulla oblongata, and in the great majority of cases where a cure has taken place the injury has been confined to the frontal bone and the parts of the brain which are covered and defended by it. I

Brodie's opinion that recovery is more apt to follow wounds of the anterior portion of the brain is strengthened by examination of the cases where the foreign body penetrated the frontal bone, of which there were one hundred and thirty-two, followed by death in fifty-eight cases and recovery in seventy-four cases.

There were fifty-eight cases of penetration of the parietal bones, followed by twenty-seven deaths and thirty-one recoveries.

The occipital bone was penetrated in twenty-three cases, with sixteen deaths and seven recoveries.

The temporal bones were penetrated in thirty-one cases, with twelve deaths and nineteen recoveries.

Wounds of the orbit were by far the most fatal, eighteen in number, followed by seventeen deaths and one recovery, although the persons were in many cases unconscious of the injury, and the unfavorable symptoms developed suddenly.

The sphenoid bone was penetrated in five cases, with four deaths and one recovery.

In forty-nine cases where the wound of entrance was not definitely stated, there were twenty-two deaths and twenty-seven recoveries.

1407 LOCUST STREET.

<sup>\*</sup> Dublin Med. Press, July to December, 1862. † Guthrie's Comments on Surgery, p. 299. ‡ Works of Sir Benjamin Brodie, vol. iii. p. 83.

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* Result.	Death. Recovery; death from apoplexy after many years. Recovery; under observation four and a half months.	Death; cerebral abscess.	Necovery. Death. Death. Death.	Recovery; death from natural causes.  Recovery; death from sunstroke one year after injury.  Recovery	Death, crebral abscess. Death.	Accovery, under observation infliced years.  Recovery: death from cerebral abscess after seven years.	Death. Recovery.	Death. Death. Death. cerebral alsones	Death, Colora access.  Recovery; death from suicide by morphia.	Death. Death; cerebral abscess.	Recovery.	Death. Reconstruction bad symptoms before eighth week.	necovery, with vertigo on stooping. Death.	Death. Recovery; under observation three months.	rry. rry, with improving hemiplegia	Death. [after thirteen years. Recovery, with convulsions; death from cerebral abxcess	Death; cerebral abscess.	Recovery; under observation nine months. Death; cerebral abscess.	ery, with fistulous opening; under observatio; cerebral abscess.	Death.  [a half years. Pecovery; death from chronic disease after nineteen and Death. carebral absence	Scourty. Death,	Recovery, with epilepsy. Death.	Death.
Time the foreign body remained.	2 days	19 days	I month	50 years	25 days Few hours	6 days.	i daySome time	4 days 5 days Some time	9 days	5 days	8 days	z3 days	17 days	6 daysIndefinitely	4 days	Short time	8 months	Indefinitely	Indefinitely	Several hours	17 months.	Short time	59 days
Re- moved.	:::	M M	: : : :	: : 2	: :≃	: : :	K K K	:::	: : :	: :p	4 :p	4 : ₽	4 K K	: :4	**	¥ :	::	: : :	: :	≃ : :	<b>X</b> :	<b>X</b> :	
Foreign body.	Ferrule of cane Ball Pistol-ball	Conoidal ballSplinter of wood	Musket-ball Conoidal ball Musket-ball	Ball. Musket-ball. 5 shot. 3 slugs	Pistol-ball Knife-blade, 5½ in.	Conoidal ballBall	Conoidal ball	Musket-ball Pistol-ball Iron canister shot.	Round ball	Musket-ball	Pistol-ball.	Pistol-ball Conoidal ball	Musket-ball. Pistol-ball	Ball. Musket-ball.	Ball	Buckshot	Leau penets and wadding Ball Musket-ball	Number of small shot	grain of shot	Iron spike Pistol-ball Conoidal ball	Pistol-ballFerrule of umbrella	Breech-pin of gun Breech-pin of pistol Musket hail	
Reference.	Dublin Jour Med Sciences, vol. x	Surg. Hist. Rebellion, p. 245	Bombay Med. and Phys. Jour., 1847-50. Surg. Hist. Rebellion, p. 202. Amer. Jour. Med. Sci., July, 1866	Andrews, loc. cit. Mem. Acad. Surgery, p. 45. Le Dran's Obs. in Surgery, 1703.		Surg. Hist. Rebellion, p. 204 Andrews, loc. cit., p. 304	Surg. Hist. Rebellion, p. 274	Sung. Alst. Rebellion, p. 203 Army Med. and Sung. Mus., 3220 Sung. Hist. Rebellion, p. 206		Army Med. and Surg. M Surg. Hist, Rebellion, F Edunburgh Med. and Su	Canada Lancet, 1872, 1873, 1873, Army Med. and Surg. Mis. 2020.	Amer Med. Times, June, 1863. Amer. Jour. Med. Sci., Jan., 1872.	Hennen's Princ. Mil. Surg., p. 235. Lancet, 1855, p. 434	Boston Med. and Surg. Jour., 1862, p. 421 Andrews, loc. cit. p. 284 Richmond Med Ton. 1866.	Andrews, loc. cit., p. 290	Phila Med Times, 1878.	Surg. Hist. Rebellion, p. 205 Army Med. and Surg. Mus. 2271	Amer. Jour. Med. Sci., Jan. 1867 Andrews, Joc. cit., p. 286	15id. p. 300.				
Reporter.	Anderson, Geo Anel Andrews, T. H	Ansell, AAppley, W. L	Arthur, F. S Ashhurst, J., Jr	Backe Bagieu Bailteron	Baker, W. Baldwin, R. F.	Bax	Beaumont, W	Bentley, E.	IbidBiart, V.	Billings, J. S. Bodkin, T.	Bogue, H. Bontecou, R. B.	Botter. Boyd, W. A.	Blackadder	Buchanan, J. A	Ibid	Camden, T. B	Campbell, J	Cheyney, B. H	Cone, E. D.	Cortese	Cowling, R. O	Cunningham, J. M. Dare, G. W.	erpenentable planter on the contract of the co
Case.	наю	4 10/0	<b>1</b> 00 0	10 11 12	13 14 15	17	81 6	22 22			78 28	30	33 33	4 100	2000	9 6 6	14 4	44	244			52 54	

490	
Result.	Death; cerebral abscess, with no bad symptoms until the seventh week.  Death.  Death.  Death, cerebral abscess.  Recovery, Death.  Recovery, Death.  Recovery: Death.  Recovery, Death.  Recovery, Death.  Recovery. Death. Recovery. Death. Recovery. Death. Recovery. Death. Recovery. Death. Recovery. Death. Recovery. Recovery. Recovery. Recovery. Recovery. Recovery. Recovery. Recovery. Recovery. Death. Recovery. Recovery. And the pressure after six years. Recovery; ander observation two months. Recovery: death from pressure after six years. Recovery; under observation six months. Recovery; under observation six months. Recovery; under observation seventy-two days. Recovery; under observation six months. Recovery; death from acuted disease after six months. Recovery; death from scarlet fever. Recovery: death from scarlet fever. Recovery: death from scarlet fever.
Time the foreign body remained.	11 days. Indefinitely Indefinitely Indefinitely Indefinitely Indefinitely Indefinitely So days. So days. So days. So days. Indefinitely
Re- moved.	MX
Foreign body.	Musket-ball.  Conoidal ball.  Pistol-ball.  Blade of pen-knife.  Half of a ball.  Part of knife-blade.  Conoidal ball.  Part of knife-blade.  Part of minte-ball.  Ball of minte-ball.  Ball of chisel.  Small rife-ball.  Musket-ball.  Musket-ball.  Musket-ball.  Did.  Did.  Did.  Did.  Did.  Piece of ball.  Balle.  Sen of obosco-pipe.  Musket-ball.  Ball.  Musket-ball.  Ball.  Ba
Reference,	Amer. Med. Times, April, 1863
Reporter.	Dase Dean, A. M. Dean, H. M. Denme, R. Dewron. Divides Edwards, T. P. Ever, P. F. Ever, P. F. Gibls, O. S. Gray, C. C. Hamitton Did
Case.	% 8788 832 22 84 80 80 85 17 4 14 75 7 75 88 88 88 88 88 88 88 88 88 88 88 88 88

		497
Result.	Recovery.  Death; cerebral abscess.  Recovery.  Bedovery.  Death from hospital fever after two weeks.  Recovery.  Recovery.  Recovery.  Recovery.  Death.  Recovery.  Recovery.	
Time the foreign body remained.	2 years. 7 days. 7 months. 8 months. 8 months. 8 months. 8 months. 8 months. 9 come time. 1 bid. 2 t days. 14 days. 14 days. 19 days. 19 days. 19 days. 19 days. 19 days. 19 days. 10 days. 10 days. 10 days. 10 days. 11 wonths. 12 months. 13 days. 13 days. 13 days. 13 days. 13 days. 14 days. 18 days. 19 months. 19 days. 19 days. 19 days. 10 days. 19 days. 19 days. 19 days. 19 days. 19 days. 25 days. 26 days. 27 days. 28 days. 28 days. 29 days. 21 days. 29 days. 21 days. 21 days. 21 days. 22 days. 23 days. 24 days. 25 days. 26 days. 27 days. 28 days. 29 days. 21 days. 21 days. 22 days. 23 days. 24 days. 25 days. 26 days. 27 days. 27 days. 27 days. 28 days. 28 days. 29 days. 20 days. 20 days. 20 days. 20 days. 21 days. 22 days. 23 days. 24 days. 25 days. 26 days. 27 days. 2	8 days. 4 days. 8 days. 3 days.
Re- moved.		
Foreign body.	Ball Conoidal ball Ball Seven drachm ball Seven drachm ball Seven drachm ball Seven drachm ball Ball Ball Ball Ball Ball Ball Ball	lbid. Pistol-ball. Musket-ball. lbid.
Reference,	Brit. For. MedChir. Sung. Hist. Rebellion, Dublin Hospital Repo Libid. Did. Did. Did. Did. Did. Did. Did. D	Army Med, and Surg, Mus., 1727
Reporter.	Jobert, M. Jindson, O. A. Jindson, Didd, Marin, C. A. Mannsch, H. C. Miller, H. V. Miller, B. B. Morgan, R. Morgan, R. Morgan, R. Morgan, R. Musnick, G. A. Musnick, G. A. Milher, H. W. Milher	Mosley, N. R. Ibid
Case.	0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	150

498	
Result.	Recovery. Recovery. Recovery, with paralysis of right and convulsions. Recovery, with paralysis of right arm. Death, preceded by loss of sight and convulsions. Recovery, with impairment of mind; under observation Death after excessive drinking. Death, cerebral abscess. Recovery; under observation six months. Death; cerebral abscess. Recovery, with headache; under observation five months. Death; cerebral abscess. Recovery, under observation one year. Recovery; under observation one year. Recovery; under observation one year. Death. Recovery, Recovery, Recovery, Recovery, Recovery, Recovery, Recovery, Recovery, Death. Recovery, Death. Death. Recovery, Recov
Time the foreign body remained.	Short time. I year. Short time. Short time. I the short time. I the short time. I months. I modefinitely. I modefinitely. I days. I days. I days. I days. I days. I days. I modefinitely. I months. I mont
Re- moved.	XX  X
Foreign body.	Piece of wire  Breech-pin  Conoidal ball  Arrow-head  Musket-ball  Buckshot  Buckshot  Ball  Bal
Reference,	Cincinnati Lancet and Clinic, 1878  Dublin Met. Press, Sept. 1847  Andrews, loc. Cit. p. 3c4  Surg. Hist. Rebellion, p. 197  Circular No. 3, 1865-77, p. 148  Surg. Hist. Rebellion, p. 190  Hall: Vearly Abs. Med. Sci., 1845  Eve, loc. Cit. p. 16  Andrews, loc. Cit. p. 3c4  Andrews, loc. Cit. p. 3c4  Andrews, loc. Cit. p. 16  Burg. Hist. Rebellion, p. 2c4  Ned. Times, 1872, 1873  Dublin lour. Med. Sciences, vol. IV. Mem. Acad. Surg. Surg. Syden Trans. p. 46  Surg. Hist. Rebellion, p. 267  Lancet, 1892, 1894  N. Y. Jour. Med. and Surg. Jour., 1874  Surg. Hist. Rebellion, p. 279  Andrews, loc. Cit. p. 3c4  Lancet, 1855, vol. iv. 2c5  Canada. Med. and Surg. Jour., 1874  Nem. Acadeny Surgery, p. 46  Surg. Hist. Rebellion, p. 201  Limeth, 1832  Circular No. 3, 1865-71, p. 147  Circular No. 3, 1865-71, p. 147  Surg. Hist. Rebellion, p. 202  Circular No. 3, 1865-71, p. 147  Surg. Hist. Rebellion, p. 203  Circular No. 3, 1865-71, p. 147  Surg. Hist. Rebellion, p. 203  Circular No. 3, 1865-71, p. 147  Surg. Hist. Rebellion, p. 203  Circular No. 3, 1865-71, p. 147  Surg. Hist. Rebellion, p. 203  Circular No. 3, 1865-71, p. 147  Surg. Hist. Rebellion, p. 203  Circular No. 3, 1865-71, p. 147  Surg. Hist. Rebellion, p. 203  Circular No. 3, 1865-71, p. 147  Surg. Hist. Rebellion, p. 203  Circular No. 3, 1865-71, p. 147  Surg. Hist. Rebellion, p. 203  Circular No. 3, 1865-71, p. 147  Surg. Hist. Rebellion, p. 203  Circular No. 3, 1865-71, p. 147  Surg. Hist. Rebellion, p. 203  Circular No. 3, 1865-71, p. 147  Surg. Hist. Rebellion, p. 203  Surg. Hist. Rebellion, p. 203  Lancet, 1832  Lancet, 1832  Lancet Jour. Med. Sciences, vol. vi., 1843  Lancet Jour. Med. Sciences, vol. vi., 1843  Lancet Jour. Med. Sciences, vol. vi., 1843  Lancet Jour. Med. Sciences, vol. vi., 1844  Lancet, 1822, 1829, 1829, p. 77
Reporter.	Mussey, W. H. Nobele, J. W. Nowie, J. W. Nowie, J. W. Nowie, J. W. O'Callaghan. O'C
Case.	165 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

Fu	y 19, 1879] MEDICAL TIMES.	499
Result.	under friend ar and ar and ar and fered filtion in inder on a stoop of a section of a section in the filting in the filter in the filting in the filter in the filting in the filting in t	Recovery; under observation four years. [8 months. Recovery, with wound still discharging; under observation Recovery, with vertigo; under observati. n 14 months.
Time the foreign body remained.	3 years 6 days. 6 days. 6 days. 7 days. 7 years 1 day 1 day 1 day 1 day 1 day 2 years 1 day 2 years 1 day 2 years 2 years 1 day 2 years 2 years 2 years 1 day 2 years 3 years 2 years	Ibid
Re- moved.	KK :   K	:::
Foreign body.	Blade of knife. Concidal ball. Nissile not stated. Swelt, flattened ball. Several small shot. Priot. of dagger. Priot. of dagger. Priot. of dagger. Ball. Brace-pin and screw. Ball. Aurse, round ball. Part of knife-blade. Ball. Part of knife-blade. Ball. Price of metal from gun. Ball. Price of metal from gun. Ball. Price of pall. Price of pall. Price of pall. Ball. Ball. Musket-ball. Ball. Ball. Brichobal. Ball. Ba	Buckshot Conoidal ball Musket ball
Reference.	London Med. Recorder, Jan. 1875.  Ever. Hist. Rebellion, p. 193.  Buffalo Med. and Surg. Jour., 1875.  Andrews, loc. cit., p. 302.  Andrews, loc. cit., p. 302.  Bid. p. 303.  Bid. p. 303.  Cincinnati Med. and Surg. News, 1866.  Surg. Hist. Rebellion, p. 192.  Newstern Med. and Surg. Jour., 1830.  Mem. Academy Surg. p. 46.  Andrews, loc. cit., p. 302.  University Hospital Case-Book.  Andrews, loc. cit., p. 303.  Ouiversity Hospital Case-Book.  Andrews, loc. cit., p. 303.  Andrews, loc. cit., p. 303.  Boston Med. Reporter and Review, 1866.  Andrews, loc. cit., p. 284.  Bid. p. 284.  Boston Med. Sci., Oct. 1867, p. 442.  Circinnati Lencet and Observer, 1876.  Bid. p. 192.  Circinnati Lencet and Observer, 1876.  Bid. p. 192.  Ibid. p. 192.  Ibid. p. 193.  Ibid. p. 194.	p. 194
Reporter.	Tumipseed, E. B. Vanderveer Van Duyn. Van Peyma Var Peyma Verking. Virod. Wiche. Wiche. Wiche. Wish, J. F. Wodward, J. J. Wildt, r. A. Vandell, D. W. Zergier. Zergier.	
Case.	121 12 12 12 12 12 12 12 12 12 12 12 12	265

500		MEDICAL TIMES.	[fuly 19, 1879
Result.	Recovery, with headache and epilepsy; under observation five months.  Recovery, with vertigo on exertion; under observation three years and eight months.  Recovery; under observation six months.  Recovery, with pain and dizziness.  Recovery, with headache and vertigo; impairment of eye and ear, under observation on the year and eight months.  Recovery, with headache and vertigo; impairment of eye and ear, under observation on inne months.  Recovery, inder observation nine months.  Recovery, with paralysis of lower extremities; under observation thirteen months.	Recovery. Recovery. Recovery. Recovery. Recovery. with epilepsy. Recovery, with dizziness and headache. Recovery. Recovery, with loss of memory. Beacovery. Death. Death. Death. Death. Death. Death. Recovery. suffers from headache. Recovery, with vertigo and oss of memory; under observation three years. Recovery, with vertigo and severe headache; under observation three years. Recovery, with vertigo and severe headache; under observation three years. Recovery.	Death. Corey. Recovery. Recovery. Leath.
Time the foreign body remained.	Indefinitely  Ibid Ibid Ibid Ibid Ibid Ibid	Few days.  1 days.  2 days.  2 days.  2 days.  1 days.  1 days.  1 days.  2 days.  2 days.  3 days.  2 days.  3 days.  5 days.  6 days.  7 days.  7 days.  7 days.  8 days.  8 days.  8 days.  1 day.  5 days.  5 days.  8 days.  8 days.  9 days.  1 day.  1 day.  1 day.  5 days.	15 days. 44 days. 44 days. 2 days. 2 days. 4 days. 7 days. 7 days. 7 days. 5 days. 15 weeks.
Re- moved.		KKKKKKKKKK IIIIIIIIIKKK I IK III	::::::::::::::::::::::::::::::::::::::
Foreign body.	Buckshot	Sonoidal ball  Toid  Toi	Miss Con Con Con Con Mus Con Mus
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Fig. 1.

A GENERAL SYSTEM OF MEAS-UREMENT FOR URETHRAL. UTERINE, RECTAL, AND OTHER INSTRUMENTS: AND AN ADAPT-ABLE METRIC GAUGE.\*

BY CHARLES HERMON THOMAS, M.D.

F the three methods of numbering urethral instruments employed to any extent in this country, that known as the French system may be said to dominate, if not to have superseded, the others, No one attempts longer to defend the purely arbitrary English scale, with its practical inaccuracies and limited range of sizes; while the "American scale," recently proposed, though an improvement in some respects on the English, is lacking in that simplicity which it should possess to entitle it to general adoption.

According to the French system.—for it is truly a system,—each size in a set of catheters or bougies is derived from, and identical with, the number of millimeters in circumference which such instrument actually measures. Thus, while No. 1 is I mm. in circumference, No. 2 is 2 mm., No. 3 is 3 mm., and so on uniformly

throughout.

The American scale, like the French, is founded on the metric system, but its successive sizes increase by half-millimeters in diameter; its numbers are consecutive in units, however, and therefore correspond neither with the figures which represent diameters or circumferences. Practically it differs from the French in that it does away with one in every three of the French sizes, a somewhat questionable improvement, though the only merit claimed for it: but in doing this a new and arbitrary series of numbers is introduced,—a serious disadvantage. For, while No. 1 is 1 mm. in diameter, No. 2 is 1.5 mm., No. 3 is 2 mm., and so on with a widening disparity till No. 20 is reached, which is 10.5 mm. measured in the same manner.

It will readily be conceded that the almost universal demand among those engaged in general scientific work for unity of standard in measures of length, capacity, and weight, which has resulted in the wide-spread adoption of the metric system, has a practical and not a senti-The various branches of mental basis.

improved methods and means of ready interchange of results of observation and experiment, which have become common to allied sciences. And in the subdepartments of urethral, gynæcic, and rectal surgery especially there is

the science of medicine have need of the

present urgent need of the establishment of a general system of measurement and record of the dimensions of the appliances em-

ployed, and indirectly, by means of these, of the calibre of the passages to which they relate.

A General Scale suited to this wide range of applications, and which shall combine the essential requisites of simplicity, definiteness, and convenience of use, together with universal scientific intelligibility, is undoubtedly practicable. For this purpose it is only required that the use of all conventional numbers or sizes. as such, be abandoned, and that there be adopted in their stead actual circumferential or perimetric dimensions, expressed in

terms of the metric unit.

This proposition, while it includes the French urethral scale, as described, is a systematic extension of it, and fitly embraces all specula and dilators, together with their related explorers and fixed cutting instruments, for whatever part designed,-whether the male or female urethra, the rectum, vagina, cervix uteri, œsophagus, Eustachian tube, or lachrymal duct. Considered in its practical relations, it forms a comprehensive system of unification, based upon the best known standard. For whatever the faults of the metric rule for general mechanical purposes, it is perfect for surgical uses; and the remarkable unanimity with which metric terms have been accepted as a part of the language of science gives promise, through their use in this connection, of valuable results; especially contributing to international uniformity.

In denoting data in accordance with the General Scale, milli- Exact size.

CENTIMETERS GENEIG MILLIMETERS

<sup>\*</sup> Exhibited to the Philadelphia County Medical Society, June 25, 1879.

meters will naturally be used for the smaller instruments and passages, while for the larger—as rectal and vaginal—centimeters should be employed. The changed form of expression will then be, for example, 20 mm. instead of No. 20 catheter,—a gain in definiteness with no loss of brevity; and in place of Sims's No. 1 Vaginal Dilator, as at present, its equivalent 10 cm.: or 8 cm. as the proper substitute for No. 10 of English rectal bougies.

The Adaptable Metric Gauge renders the foregoing scheme directly practicable, and is a simple appliance, mechanically similar to the glover's measure, the outgrowth of an effort to secure the highest attainable accuracy and precision for purposes of record, comparison, and operative procedure. For instance: during several vears I have made somewhat frequent use of Otis's Dilating Urethrotome, and, though using at different times the best procurable constructions of that admirable instrument. have found that a ready means of verifying or correcting its index was essential to its perfect working. One now in use, and an otherwise faultless piece of mechanism, being measured accurately over the knife in place, shows an excess of size over that Such an error not registered of 4.3 mm. recognized and provided against, in an operation of such delicacy as that of Otis for internal urethrotomy, whose only hope of success is founded on strict accuracy and correspondence of measurements, may at any moment be the source of mischief, or even of fatal results.

Experience of more than a year in the use of the gauge, as illustrated (Fig. 1), has proved that it is most conveniently made and used when printed upon strong parchment-paper or thin celluloid. It is then to be cut out, following the line of its borders; the broad end, which is the handle, is to be backed with cardboard and perforated along the dotted line at the beginning of the scale; the narrow end, which is the flexible measuring strip, is then to be bent backward and passed through the opening just made, when the instrument is ready for use. The object to be measured



being placed within the sliding loop (Fig. 2), and the ends being drawn upon in

opposite directions, the dimensions in millimeters or centimeters may be read off from the point on the measure between the arrow-heads.

Viewed in the light of its uses, and being accurate to a fraction of a millimeter, the gauge is an "instrument of precision," adapted to ascertaining the dimensions of the perimeters of a great variety of forms in uniform terms, and possessing the special value of utilizing old appliances; for with it their equivalence under the general scale is at once determined. When contrasted with the ordinary scale or gauge-plate, the adaptable gauge will be seen to be possessed of several important advantages. It, unlike the former, has a great range of capacity; is as well fitted to measure instruments of irregular outline-urethrotomes, metrotomes, divulsers, folding specula, and the like—as perfect cylinders; and, moreover, is itself capable of being instantly verified by comparison with any standard metric rule.

1807 CHESTNUT STREET.

# NOTES OF HOSPITAL PRACTICE.

JEFFERSON MEDICAL COLLEGE HOSPITAL.

CLINIC OF PROF. S. D. GROSS, M.D., LL.D., D.C.L., PROFESSOR OF SURGERY IN JEFFERSON MED-ICAL COLLEGE, ETC.

ON CLUB-FOOT: ITS VARIETIES, PATHOLOGY, AND TREATMENT BY SUBCUTANEOUS TENOT-OMY—HISTORY OF THE OPERATION—AFTER-TREATMENT.

ENTLEMEN, — This apparently I healthy child is brought to us by its mother with the statement that there is some deformity requiring our attention. It is now four months old, and the condition has existed since birth. As we stand the baby on its feet, you notice that the weight of the body rests on the outer side of the foot, the heel and the inner border being drawn upward by the contraction of the calf muscles and the fibres of the tendo Achillis, together with the adductors of the foot. This variety of talipes, There is a or club-foot, is called varus. condition the reverse of this, in which the sole of the foot is turned outward by the contraction of the abductors, and the weight is borne upon its inner border, which is called valgus; it is a very uncommon affection as compared with varus, and is very rarely congenital. When the con-

traction exists solely in the calf muscles and their tendon, the patient walks on the ball of the foot and the phalanges, the heel being lifted several inches from the ground. This deformity has been termed the phalangeal variety of club-foot, or talipes equinus. When existing alone it is rarely if ever congenital. In combination with the preceding forms, however, it almost constantly exists, forming the well-known compound conditions of talipes equinovarus and talipes equino valgus. Finally, we have a condition known as calcaneus or calcaneal club-foot, in which the toes are lifted from the ground and the patient walks upon his heel. This is caused by a contraction, almost always congenital, of the anterior tibial muscle, the extensor of the great toe, and occasionally of the common extensor of the foot; or it may be occasioned primarily by paralysis of the calf muscles.

The deformity before us is that of equinovarus, or simply varus. This condition may appear in various degrees and may affect one or both feet; perhaps more frequently it is confined to one, the other escaping entirely, or it may exist in both of the corresponding extremities in different degrees. In some families there seems to be a hereditary tendency to this affection. It occurs in both sexes; but in my experience it has been encountered most

frequently in males.

In this case we have the highest degree of the deformity. We notice a depression at this portion of the inner margin of the foot, due to the contraction of the plantar aponeurosis, which frequently complicates this condition, and in some cases is quite marked, requiring subcutaneous division of this structure with a tenotome. our patient, however, the plantar contraction is comparatively slight; the main trouble is caused by the contraction of the tendo Achillis and the gastrocnemius In estimating the probable results of treatment, you must not forget that the bones, in these cases, are also more or less distorted, especially the heel-bones, the astragalus, cuboid, calcaneum, and scaphoid; but the remaining bones of the foot, the metatarsal and phalangeal, participate more or less in the deformity, though not to so great an extent as the former. The ligaments are also imperfectly and unequally developed. Not infrequently club-foot is associated with other evidences of defective

development of the organism, such as harelip, exstrophy of bladder, or bifid spine; and I have seen cases where these all coexisted.

The cause of club-foot is unknown. It has been supposed to be due to deficient amniotic fluid, and the consequent pressure of the uterus upon the feet of the fœtus; but in such a case why would the effects be seen only in the feet? Why would it not in a similar way influence the upper extremities and other portions of the body? My own theory is that the condition is originally caused by defective power in the nerves supplying the part, which leads to inability in the muscles to perform their proper functions, and unfits them for resisting the normally active opposing muscles.

This child is four months old, and appears well developed. Youth is no bar to the operation for club-foot; on the contrary, treatment should be instituted early to prevent permanent deformity of the How shall this be accomplished? In ordinary cases you may correct the trouble by mechanical appliances alone; but when the deformity exists in such a high degree as in this case I hold that all such efforts must either prove abortive or require more time to obtain a successful result than the attendants or parents are willing to bestow. The proper way is to divide the tendo Achillis about three-quarters of an inch above the attachment to the heel-bone. I am in the habit of making a small incision through the skin at the desired spot with the sharp-pointed tenotome, which is then laid aside and a probepointed instrument introduced through this opening, in order to divide the tendon. The preliminary incision is so slight as to be scarcely more than a puncture, just admitting the blunt tenotome, which is then inserted just in front of and parallel with the tendo Achillis; the edge is then turned directly backward, and the tendon cut with a sawing motion of the knife. The small puncture is now hermetically sealed with an adhesive strip. This is generally a bloodless operation, though sometimes a small vein is divided, from which there is an escape of a few drops of blood; the slight hemorrhage is, however, readily controlled by pressure. I have never cut the posterior tibial artery, but if this should happen the proper plan would be to cut through the artery, completely dividing it, and apply compression; the ligature will rarely be

After the tenotomy, the false needed. anchylosis and adhesions are broken up by strong efforts of the hand, and the foot is placed in an apparatus to keep it in an improved condition. This is usually some modification of Scarpa's shoe.

True subcutaneous tenotomy was first performed by Stromeyer, of Hanover, in Previous to that date the operation had been attempted by free incision, but it was a failure. In 1816, Delpech, a distinguished surgeon of Montpellier, instituted the present operation. He was the first to divide the tendo Achillis subcutaneously, so to speak, but unfortunately he also made a small incision on each side about half an inch in length, into which he inserted his knife in cutting the tendon.\* It remained for Stromeyer to place this operation on a firm and enduring basis by clearly defining the principles and method of performing this operation.

We have here a shoe materially the same as that invented by Scarpa when he was professor in the University of Padua. He was the author of a work on club-foot. and also wrote on hernia, on the eye, and The shoe has on various other affections. two lateral iron braces running from the sole of the foot up above the knee; there is a hinge at the ankle, and another at the knee, allowing flexion and extension of these joints; there are also horizontal bands or girdles, one above and one below the knee, which keep the apparatus close to the limb. The shoe is made of soft leather, and laces up the front. sole is of steel and is in two pieces, the anterior one being rotated in a horizontal plane around the posterior to a moderate extent, the amount of abduction or adduction of the front part of the foot thus produced being regulated by a set-screw at Another screw regulates the the side. When the apflexion at the ankle-joint. paratus is put on, a roller bandage should be previously applied from the foot to the thigh, although this is not essential.

In small children it is best to give a few whiffs of chloroform when the operation is performed, so that struggling will not interfere with the surgeon; but the operation itself is nearly painless. I am in the

I may state, by way of parenthesis, that it is a question that has been much discussed of late years whether a man or woman could have chloroform administered to them during sleep, for the purpose of robbery or rape, they being perfectly unconscious. I have succeeded in administering chloroform to children during sleep without wakening them, but they usually sleep more soundly than adults. It has been claimed in the courts that men and women have been similarly influenced; but I doubt it very much. You see this child has wakened now, although it was asleep when the chloroform administration began.

During the operation of tenotomy for club-foot, the child should be placed upon This child is very fleshy, its abdomen. and there is some difficulty in finding the tendon, but now having inserted the knife the structure readily yields before it. I am now extending and bending the foot so as to break up any adhesions that we can control in this way, for the purpose of further. ing the after-treatment. This child has been operated upon before, and the operation is always a more unsatisfactory one when it is performed for the second or third time. There is always in a primary operation a distinct snap when the tendon is divided, which is prevented in second or third operations by the adhesions that have been contracted with the surrounding parts.

Adhesive plaster and a compress of patent lint are placed over the puncture. A roller bandage is now smoothly applied, and we are ready for the shoe, which has been especially fitted by the instrument-maker for this case. The apparatus must be taken off in forty-eight hours, and subsequently removed every day, in order that the limb may be washed and well rubbed. care must be taken to prevent any chafing or unequal pressure.

We frequently find in these cases that the muscles of the leg, and even of the thigh, are impaired in their functions and changed and wasted in their structure. Electricity should be used in such cases, and sorbefacient liniments may be resorted to; shampooning the muscles, or massage, is of the greatest benefit. The duration of treatment varies according to the case; it may extend from two and a half to six or

habit of putting on the shoe immediately after the operation, as it saves trouble.

<sup>\*</sup> The fate of Delpech was a peculiar one. A young man came to him with varicocele, upon which he operated successfully. The patient, however, being engaged to be married at a near date, soon became tormented with the fear of being unable to consummate the marital contract, and in a fit of rage he assassinated his surgeon,

eight months. The after-treatment is of great importance, and the general health of the patient should receive due attention. (To be continued.)

#### TRANSLATIONS.

ETIOLOGY OF ALOPECIA AREATA. - Dr. Hans Büchner contributes his share to this vexed question. His conclusions are as follows: T. The hypothesis that the loss of hair in area celsi is due to faulty innervation of the trophic nerves is untenable on anatomical and physiological grounds. 2. The theory which attributes area celsi to diminished nutrition with lessened growth of the hair is no explanation, but only a description of the affection. The fungous theory is the only one which is justifiable in the present condition of our knowledge. The lack of microscopic proof of the presence of fungi up to the present time does not invalidate this hypothesis, because, under present circumstances, small single-celled non-colonized schizomyceton may escape observation. Certainty in this question can only be attained by careful researches in cultivation together with inoculations. - Virchow's Archiv, Bd. 74, Heft iv.

DIPHTHERIA IN FOWLS.—M. Nicati fears the possibility of the transmission of diphtheria from birds to men. M. Trasbot has endeavored vainly to inoculate dogs and pigs, while the inoculation from one fowl to another is successful. of M. Trasbot placed some of the diphtheritic deposit from fowls upon his fauces without succeeding in inoculating the M. Trasbot therefore considers Nicati's fears groundless. M. Mégnin also denies Nicati's theories, considering the so-called diphtheria of domestic fowls a parasitic disorder which cannot be inoculated in the human race.—Le Progrès

Méd., 1879, p. 345.

INTRA-VAGINAL AUSCULTATION IN THE EARLY DIAGNOSIS OF PREGNANCY.—Prof. Ferdinando Verardini says that while exterior or supra-abdominal auscultation is very uncertain, the utero-placental murmur heard through the medium of the intravaginal stethoscope on the other hand forms an incomparable means of diagnosis, and one which can be employed successfully in the very earliest stages of pregnancy. Heard more strongly than usual, this murmur leads to the suspicion of twin pregnancy. Heard very distinctly in the later months of pregnancy, it points to placenta prævia. - Four. des Sci. Méd. de Louvain, 1879,

p. 219.

SEVERE INJURY OF THE FINGERS—ALOES USED AS A DRESSING-CURE. - Millet, in a case of contused and lacerated wound of the fingers, where the phalanges only hung by a strip of skin and the tendon of the flexor digit, profundus, applied a split with an occlusive bandage containing powdered aloes, thickly covering the wound. Complete cure, with mobility of the fingers, resulted, two dressings being used in four-The use of aloes as a dressing teen days. in wounds opening into the joints has long been known to veterinary surgeons. 1874 Delioux de Savaignac recommended its use in general surgery.—Cbl. f. Chir., No. 21, 1879; from Rec. de Pharm. Mil.

PRÆPUTIAL CALCULI.—Dr. Moeller had under his care a child 3 years of age who suffered with phimosis. The mother had remarked that it urinated with difficulty, that the prepuce swelled up considerably at the moment, and that occasionally the stream suddenly stopped, causing the child to scream. The præputial opening only admitted a sound two millimetres in diam eter, which detected a hard body. præputial opening was dilated, and a calculus of thirty grains was extracted. Lewin, of Berlin (Berlin. Klin. Wochens., March 31 and April 7, 1879), records three cases of præputial calculus, and cites fifteen more, all which are on record. calculi may either arise from the præputial glandular secretion, from urine stagnating in the præputial sac, or from small urinary calculi lodging in this locality. - Four. des Sci. Méd. de Louvain, 1879, p. 271.

FATAL RESULT OF IRRIGATING THE PU-ERPERAL UTERUS.—Bruntzel tells of a case in which sudden death occurred in a puerperal woman after intra-uterine injection. It was the woman's second labor, and up to the fourth day everything had gone on Having gotten out of bed and regularly. worked about the house, the patient was seized with chills, and the lochia became Intra-uterine irrigation with a one and a half per cent. solution of carbolic acid was employed, and was well borne. On the next day the injection was repeated; one litre had been used, when suddenly the patient's eves became distorted, she lost consciousness, and, in spite of every restorative, succumbed. Autopsy by Ponfick gave negative results; neither thrombi, air emboli, nor direct entrance of water into the veins could be demonstrated. Since free exit was given through the cervical canal, the conclusion reached was that the patient had died from shock. Bruntzel thinks that hereafter intrauterine injections should be employed only where blood-poisoning is threatened by retention of the secundines.—Berlin. Klin. Wochens., 1879, p. 201.

INFLUENCE OF THE PERSPIRATORY SECRETION ON THE DIGESTIVE POWER OF THE GASTRIC JUICE, ETC. — Sasseski, working under the direction of Professor Manassein, arrives at the following conclusions:

1. The secretion of sweat diminishes the digestive power of the gastric juice.

2. The acidity of the gastric juice is diminished.

3. The absolute and relative acidity of the urine is at the same time diminished.

4. This influence becomes more marked in proportion to the amount of the perspiration.

In dyspeptics who perspire freely this secretion ought to be, if possible, diminished to improve the digestive powers.—
Cbl. f. Chir., No. 21, 1879; from St. Petersb. Med. Wochens.

THE SURGICAL TREATMENT OF WANDER-ING KIDNEY.-Fr. Keppler remarks that even when without any complication wandering kidney may act very unfavorably upon the general ability for work, as well as the peculiar action of the organ itself. It may give rise to suddenly developing disturbance of nutrition so as to require surgical interference. Keppler gives a series of illustrative cases. In many of these the condition was suddenly developed, in others gradually; the right kidney, was the one invariably affected. Among the symptoms are digestive disturbances (chronic constipation) and neuralgia. As to the physical diagnosis, Keppler asserts, contrary to the usually-received opinion, that the presence of wandering kidney cannot be demonstrated by percussion in the lumbar region, since the percussion-note supposed to be caused by the kidney has in reality nothing to do with this organ, and persists when it has been removed. Bimanual palpation in the lumbar and hypochondriac region after Freund's method can alone be depended upon. Extirpation of the kidney, says Keller, is the only way of relieving the symptoms. Two cases are given in which the right kidney was removed by abdominal section. In both of these a good recovery was made and the patients restored to health and activity.—Chl. f. Chir., 1879, No. 23; from Arch. f. Klin.

Chirurgie.

SYMPTOMS OF TUBERCULAR MENINGITIS. -M. Ferd, Dreyfous, in a recently published thesis, endeavors to show that many of the usual symptoms of tubercular meningitis are due to the predominance of lesions in the region of the pons and pe-He also calls attention to some clinical symptoms not often noticed, although quite frequent, which may explain the same localization. After reviewing previous work in this direction, Drevfous speaks of the fact that, as in the majority of nervous diseases, the symptoms observed depend far more on the locality of the lesions than upon their nature. These symptoms are, disturbances of sensation, generalized anæsthesia, complete, alternate, or simple facial hemi-anæsthesia, hemi-hyperæsthesia, generalized hyperæsthesia, motor disturbances, alternate hemiplegia, localized convulsions, choreiform movements, grinding of the teeth, ocular troubles, conjugate deviation of the eyes from paralytic strabismus, nystagmus, troubles of deglutition, of respiration, a special cry, vasomotor phenomena, possibly a peculiar "émotivité," as in paralysis agitans, rotation of the head, almost constant decubitus on the injured side, finally, a tendency to gyratory movement from right to left in a lesion situated to the right, and from left to right in a lesion on the left side.

In the second part of his thesis, Dreyfous gives a large number of detailed observations of great interest, showing that some of these symptoms occur in all cases of tubercular meningitis. He lays stress in particular upon the cry, which is of two kinds: in the early period short and sharp, in the second and third periods prolonged and plaintive. He also speaks of the characteristic attitudes of the patient. In lesions of the peduncles this is crouched and lateral; in cerebellar lesions the decubitus is dorsal, with flexion of the forearms. When granulations have invaded the pons, extension is the rule. The thesis is an able one and of great interest.—Abstract in La

France Méd., 1879, p. 365.

# PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, JULY 19, 1879.

#### EDITORIAL.

"FREE OUININE."

ON the last day of its recent session Congress passed what is known as the "McKenzie Quinine Bill," and, having been signed by the President, this has now become law. It reads as follows:

"A bill to put salts of quinine and sulphate of quinine on the free list.

"Be it enacted, etc., That from and after the passage of this act the importation of salts of quinine and sulphate of quinine shall be exempt from customs duties, and all laws inconsistent herewith are hereby repealed."

The passage of this bill has been secured only after much effort, in which it is said that Southern influence has been largely felt. Medical men and societies in different parts of the country have, however, repeatedly petitioned Congress for the passage of some such measure, and it may fairly be said to have been the desire of the medical profession throughout the United States that quinine should be placed upon the free list. The motive of this desire has been various. most of the advocates of "free quinine" the feeling that such an important drug should be procurable as readily and at as low a price as possible has been doubtless uppermost; with others a vague sentiment, not unakin to that of the "sand-lot" patriots, that some "cursed monopolists" somewhere were sucking the life-blood of the people, may have had weight; while a smaller, but probably the most influential and active of all, were unquestionably moved by the laudable desire to get part of the business enjoyed by the few great firms in this country who chiefly supplied the market.

It was natural that those whose profit was largely dependent upon this manufacture should bring forward the opposite view: and this was done chiefly in the form of gratuitously-distributed information, showing the sources of the barks, the expense of procuring them, and the probable destruction of our native manufactures if foreign products should be allowed to compete with those of this country thus heavily handicapped. In addition. it was thought by disinterested persons that much stress should be laid upon the absolute and proverbial purity of the native drug. Scarcely an article known to commerce in the form of drug or chemical which can be adulterated is found pure. Only, no slur has ever been cast upon American quinine. This should have been a strong argument against letting loose the flood of foreign drugs of whose purity we can have no guarantee, and which, by all rules of analogy, will probably prove largely adulterated wherever adulteration is possible.

But the question of "free quinine" is at present solved in the affirmative. Free it is, but already higher in price; and there is only too much reason to fear that the two chief manufacturers of the article in this country will find it to their advantage to abandon the field, and to leave us in complete dependence upon foreign sources for one of the most important drugs in the pharmacopæia.

## CORRESPONDENCE.

#### LONDON LETTER.

THE societies are closed for the present session, after a rather monotonous winter. Consequently something may now be said about medical institutions in this country; and workhouse infirmaries are worthy of a few words. Before proceeding to discuss their management, a word or two may not be out of place as to our poor-law arrangements. If Americans are as imperfectly acquainted with our pauper arrangements as we are with yours,—for I do not even know if you have

any poor and any poor-laws in your rich country.-the information will not be altogether unwelcome. Up to a comparatively recent period, the workhouse infirmary was but a portion of the general building set apart for infirmary purposes. The word "workhouse" means, as its construction implies, a place of residence for men who could not obtain work, and who there broke stones, picked oakum, or engaged in some form of labor more or less remunerative. Such was a workhouse immediately after the passing of the new Poor-Law Act some thirty-five years ago. But now a workhouse is a very different place: it is a home for the destitute, the infirm, the crippled, and, indeed, every one who cannot succeed in getting a living outside. Of course it is obvious that such places should not be too comfortable for a portion at least of their inmates. Heaven knows our working-classes are pauperized enough as it is, without educating them to regard the workhouse as an asylum where they can spend their declining years in comfort and, indeed, for many of them, in luxury. There is a sufficiency of plain food and regular hours, but the drawback is, there are regular and early hours for going to bed and getting up, and no publichouses in which to have a drink and a row. Consequently, a portion of the inmates are off as soon as they can to their old haunts and ways. Some come in regularly for the winter; others only pay casual visits to the workhouse.

At present the workhouse is a large block of buildings ruled by a superintendent, who is not a doctor. At no great distance there stands another large block of buildings, -- the infirmary,-under the control of a medical superintendent. Of course, for both there is a committee of guardians, ordinary and exofficio. An ex-officio guardian is a magistrate; the ordinary guardian is elected by the ratepayers, to look after their interests-and the interests of the poor. It would be easy to sneer at both classes of guardians, if any good would come therefrom. The ex-officio guardian is, or labors under the impression that he is, a gentleman, or would like to be thought The ordinary guardian is usually a pushing man, who sees his way to a certain social success by devotion to public duties. A certain antagonism exists, very naturally, betwixt the two sections, which tends to limit their offensive power, else the life of officials under their sway would be very unenviable, if not utterly intolerable. As all superior appointments are made under the sanction of the local government board,—the central authority which rules and controls all local administrative bodies,—the officials are fairly protected against their governing committees, as the consent of this central authority is required for the appointment and removal of these officials. Consequently, such officials are not entirely at the mercy of the caprice of their committees, one of the curses of institutions "supported by voluntary contributions."

The medical superintendent is the local ruler of the institution known as the "Infirmary," or "Sick-Asylum," the terms being synonymous. Some of these institutions are of great size, containing from five hundred to eight hundred beds. As regards the buildings, they all are built upon the pavilion system, or as near an approach to it as is prac-There is no waste of money on ticable. ornamentation, and the bricks in the interior of the building are merely painted over, the brick-work being in no way concealed thereby. This gives a certain look of a non-imposing character, not to put too fine a point upon it; but still the wards are thoroughly comfortable. The ventilation is "cross," and is effective, by dint of the assiduous attention of the nurses; for the cockney, like other Britishers, has no affection for fresh air, and has an excessive dread of a draught. Large, airy, well-lighted wards are unfamiliar and no doubt repulsive to a certain section of the inmates. The beds are comfortable. and the bedclothes sufficient in quantity and of good, if plain, material. The dietary is liberal, but has the drawback which exists with all English cookery, viz., that it is expensive, and not what it might be and ought to be. Solid chunks of meat, either in joints or massive chops, are wasteful in the first place. Then the chops are commonly only half eaten, and the plate with a cold chop and cold potatoes, or other vegetable, is not appetizing. Why stews cannot be made is a mystery to me. Of course one is quite aware of the fact that a stew suggests the idea of meat that has been cooked before, and that such stews are neither nice to eat nor easy to digest, as every dyspeptic knows well, no matter what the social rank. But why stews should not be largely made with a small quantity of fresh meat, with a certain amount of fat therewith, and with potatoes one day, and with peas, chopped carrots, and turnips another day, is only known to the true, genuine British cook, who will learn nothing and forget nothing. Probably if any member of the committee was to pay some attention to the food, he would get well lectured at home, and find his wife, or other head of the household, as ignorant and as prejudiced as the infirmary cook, and as strongly in favor of "plain roast and boiled." They are a long-suffering people, these Anglo-Saxons, with all their energy, and have endured much domestic privation at the hands of their spouses. How some men find the patience to put up with the dietary provided for them is unknown to me; and some housewives would drive me to distraction in a fortnight, and, as it is, make one profoundly thankful that by somebody else marrying them, one is thereby in no danger of doing so oneself.

But this is a digression, and the committee-

man who feels inclined to commiserate the pauper about his dietary probably recognizes, with a sigh, that the pauper, in that respect, is as well off as he himself is at home. There is a sufficiency-indeed, an abundance-of food, such as it is, when cooked, and with all its potentialities if cooked properly. Then there is no stint of medicines, no matter how expensive, and every medical and surgical appliance and instrument is provided at once if its curative utility can in any way be substantiated. Then, as to the value of these institutions to their inmates there can be no question, on the part alike of the patients and their medical advisers. For the man who wishes to work, such places are invaluable. He can study the clinical phenomena of diseases; he can observe the action of remedial agents and of dietary,-for is not the patient absolutely under his control?—and then, if he can't cure him, he can verify his clinical notes by the appearances found in the deadhouse, for the patient can't take himself off and die in a hole like a rat, as the patients of other hospitals can, and do very often. This is a phase of human meanness which ever excites my wrath and indignation. receiving the benefits of an institution, and an opportunity comes for making some compensation to the public for their charity and the medical man for his pains, the dying patient takes himself off, and so any lesson he could teach is lost. I well remember a villain of this detestable sort when at Leeds. condition excited keen interest in Clifford Allbutt; the wretch's suspicions became aroused; he would stay no longer in the infirmary. He was placed under my surveillance at the Dispensary; but the interest taken in him again roused his suspicions, and he betook himself to a private doctor. He knew we wanted to have a look at one of his lungs. and determined we should not, and, to aggravate me still further, planted himself where he could sit at the window and grin at me on my way round every second day. The scoundrel knew he was dying, and used to be there at the window with the utmost regularity, to show himself to me and chuckle at my disappointment. Perhaps this experience has embittered me against the patient who will not aid the advance of science, or, at least, assuage a pardonable and natural curiosity.

Many of the medical officers of these institutions are able, energetic men, who like their profession, who are ready to cut for stone, do an amputation, or try the last new remedy. Others are mere officials, who perform their medical duties in a perfunctory manner, but who are good administrators, and who see that the place works smoothly. Yet there is much left to be desired. Surely these places ought to be utilized for the purposes of medical teaching rather than the hospitals, which are supported by voluntary contributions. A regular staff of physicians and surgeons could readily be

found for every one of these institutions. But there are two sets of persons opposed to such arrangement: I, the committee-man, who sees in an unpaid medical man one who would thwart him sometimes, and, perhaps, divide his supreme control; and, 2, the rate-payer, who might have a natural objection to any expenditure beyond what is absolutely requisite. Nevertheless there is a great waste of excellent "material," to use an expression in vogue in the Krankenhaus of Vienna.

These representatives of the rate-payers are men not to be trifled with in their way, and are inclined to take summary measures with the recalcitrant. The other day, passing the Islington workhouse, I looked in to see if there was anything novel. My attention was quickly arrested by the following notice, which was placarded up all over the receiving-room. "Saint Mary, Islington. Caution, -Whereas, many persons have been admitted into the Workhouse of the Parish, suffering from Delirium Tremens, caused by excessive drinking, and have thereby become chargeable to the Parish, when they might have been earning sufficient wages to maintain themselves, had they avoided intemperate habits. Notice is hereby given, that the Guardians of the Poor of this Parish will in future cause such persons to be charged at the Police Court with wilfully neglecting to maintain themselves, and thereby becoming chargeable to the Parish (for which offence they are liable to be imprisoned, with Hard Lagur, for one Calendar month), or otherwise proceeded against according to law. By order, December, 1878." Whether any such prosecution has actually yet taken place or not, I do not know; but the idea is an excellent one.

These guardians are practical anyhow, and their wits are often exercised with their material, which is often of an objectionable character. Of course, within the infirmary the committee can only act through their medical officer, who is usually a man of sense who does not court conflict. Besides, they know their hands are partially tied. The Local Government Board elects and removes, and before their officer could be got rid of the central authority must be convinced by evidence furnished, while the medical officer's defence is taken before any decision is arrived at, and this insures the medical officer a fair hearing and protects him from malicious busybodies. As said before, the medical officers of these parochial infirmaries are infinitely better off than the house surgeons of charitable institutions, who are often shamefully persecuted by objectionable members of the committee, in collusion with the matron, by whom a system of espionage is carried out. Some central authority-"The Charity Commission," for instance—ought to exist in regard to institutions "Supported by Voluntary Contribu-tions." House surgeons and resident medical officers may not invariably be immaculate

and without blemish, but many a one has been very badly used and maltreated by the sort of

conspiracy just alluded to.

The medical officers go all round the infirmary every morning, and again in the evening, as well as being called whenever occasion requires, so that their duties are heavy. The wards form an exercise-ground of no very limited area, and with but a vitiated atmosphere to respire. The patients are very interesting both as to themselves and their maladies, and their histories are often curious. Men who have seen better days in every sense of the word, men who are gentlemen by birth and bringing up, men who are accomplished scholars, or who have held responsible positions, men who have been excellent workers till crippled by an accident, are all there alongside of the most degraded social waifs. Of course this is unfortunate, but it is unavoidable; and, from personal observation, I can say that the medical officers, alike the superintendent and his subordinates, do all that lies in their power to mitigate the asperities in the lot of these unfortunates. As to the attention paid professionally to the pa-tients, it is all that can be desired, and no pains are spared to restore each patient to his place as a working social unit. Some further account of these institutions, especially their lying-in wards, will be given in a subsequent letter.

The grave has scarcely closed over Charles Murchison, when another victim to disease of the heart has died suddenly. William Tilbury Fox is well known by his writings on diseases of the skin. The son of a distinguished medical man, to my mind the ablest country practitioner I have ever been privileged to know, he was trained up to medicine from his childhood. Like many other men who ultimately win their way to fame in some specialty, Fox, after a brilliant student career at University College, commenced practice as a general practitioner. Then he determined to work at a special subject, and at first se-lected midwifery. This he soon abandoned for diseases of the skin, to which he devoted special attention, and soon attained a reputation. In the mean time the problem of how to make a living was solved by his working for the Lancet, of which journal he was for some time the working editor. This of course led up very satisfactorily to a good consulting practice, for Tilbury Fox knew the little ways of London as thoroughly as any man I have ever come across.

He became the Physician for Diseases of the Skin at University College Hospital, where he had an elaborate arrangement of baths for the purposes of treatment. In the midst of his prosperity he became conscious that he was the subject of disease of the heart. He and Murchison were great friends. They both suffered from aortic regurgitation, and when Murchison was called away, Fox began

to put his house in order. He went to Paris for a few days of rest, when he was seized with angina, which proved fatal, but not with the suddenness which marked the end of Murchison. Both were Christians in what Fox called "the now, I fear, much-despised sense of the word," and Fox, with the enthusiasm of a convert, left on record his profession of faith for his obituary notice in the Lancet. Fox was a keen-witted, shrewd observer of men as well as of skins, and possessed much of his father's talent, but not his commanding ability. Every one sympathizes with the bereaved old man lying on his death-bed: indeed, since the above was written he has died. His oldest son, who was associated with him in his practice, was carried off prematurely: he lived to see another son win a world-wide reputation, when he is swept off in his prime. A younger son is just mounting the ladder to distinction, but his father has not lived to see him win his spurs; he had the satisfaction of knowing that he will win them. Dr. Thomas Fox co-operated with his older brother in the production of an "Epitome of Skin Diseases," and is himself a rising dermatologist of much promise. He carries with him the good wishes of every one for his future success, and no one who knows him feels any doubt about his capacity to maintain for the name of Fox the reputation which has been won for it in relation to the diseases of the skin.

J. MILNER FOTHERGILL.

### PROCEEDINGS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF PHILA-DELPHIA,

THURSDAY EVENING, APRIL 10, 1879.

THE PRESIDENT, DR. H. LENOX HODGE, in the chair.

Caries of the vertebræ and general miliary tuberculosis. Presented by Dr. E. T. BRUEN. ONSTANTINE W., æt. 31 years, was admitted to the Philadelphia Hospital, February 14, 1879. He stated that deaths have occurred in his immediate family from acute diseases only, and there was no evidence of phthisis or scrofula. His sickness seemed to have dated from September, 1878; before this period he enjoyed perfect health. In the month just mentioned his legs swelled slightly; he became constipated, with anorexia. Feelings of malaise, without any definite complaint, succeeded the above symptoms, and during January, 1879, he noticed that his abdomen commenced to swell and the ædema of the legs disappeared. There was no history of diarrhæa, jaundice, or vomiting, although he steadily lost flesh. When examined on the above date, his abdomen was found distended: the measurement thirty-seven inches; there

was moderate ascites, but much of the distention of the abdomen was occasioned by gas in the intestines. There was no pain on pressure over any portion of the abdomen, nor was there any thickening of the abdominal walls; on the contrary, these tissues were thinned out and very compressible. The spleen was enlarged, dulness measuring six inches verti-cally by eight inches longitudinally. The liver was not increased in size, as was demonstrated by percussion. There was no cedema of the feet, no albumen in the urine, nor any abnormal deposit. Over the lungs the respiratory murmur was broncho-vesicular, the bronchial element predominating, and at the bases of both lungs fine subcrepitant râles could be heard over a space occupied by the breadth of two fingers. There was a persist-ent expectoration of white frothy mucus. Other physical signs were consistent with those obtained by the examination of a healthy chest. Heart-sounds were natural, and the limits of præcordial dulness were observed to accord with normal dimensions. Between the crest of the ilium and the lower ribs, in a position equidistant from both, and three fingers' breadth from the spines of the vertebræ, I noticed a swelling the size of a man's hand. This swelling felt doughy, very much the same feeling as when a fatty tumor is examined. This tumor, however, disap-peared when the patient was placed on his face, and the spot became resonant, though the tympany was evidently transmitted. The size of the tumor was increased when the patient sat up, and the tumor was not altered by the act of coughing, nor was there any noticeable impulse communicated to it.

On four subsequent occasions I attempted to aspirate this tumor, using different needles of larger calibre each time. Twice after the operation the patient experienced an attack of hæmaturia, lasting five or six days, but subsiding after suitable treatment and rest. I was able to withdraw on each of these occasions a cheesy material sufficient to fill the needle of an aspirator, but never did I succeed in withdrawing pus in greater amount than half a drachm. The material, micro-scopically examined, contained shrivelled pus-cells, oil-globules, large amount of granular débris; also a few epithelial cells, many reddish - yellow spheres (which suggested spheres of leucin); the above indicated pus undergoing cheesy degeneration. Without lingering over the many interesting clinical features of the case, I will state that the abscess was not believed to be connected with the liver, as there was absence of enlarge-ment of that organ, jaundice, pain over hepatic region, or any history or evidence of intestinal disease. The abscess was believed to have an origin in the tissue surrounding the kidney, or to proceed from necrosis of the vertebræ. But the facts appeared to militate against the latter diagnosis, as there was no

pain on pressure over any of the vertebral spines, and the ordinary tests of passing sponges wet alternately with hot and cold water up and down the vertebral column resulted negatively, as did Rosenthal's test with electricity. There was no spinal curvature nor pain when the erect position was assumed. To these facts I desire to call especial attention. The ascites, which diminished in amount during the treatment of the case, was attributed to tubercular peritonitis, due to the absorption of pus from the abscess, and tuberculosis of the lungs was suspected.

I would call attention to the statement that there was no abdominal pain nor retraction or thickening of the abdominal walls. Over the lungs, until within a week of the patient's death, which occurred April 1, 1879, bronchovesicular breathing continued, but at that time numerous fine, dry, crackling râles could be recognized from the apices of both lungs to their bases, and irregular patches of dulness could be mapped out on percussion. There was never any expectoration beyond the frothy mucus mentioned above. I would also say that over the abscess there was never any pain or any redness, although the cavity gradually became very superficial. Believing the abscess not to be due to caries of the spine. it was opened by my colleague, Dr. White, and at least ten or twelve ounces of pus in a cheesy, fetid state escaped, but on examination with a long bullet-probe dead bone could be distinctly recognized on the bodies of one of the dorsal vertebræ. The death of the patient was accelerated by the operation, through capillary oozing of blood occasioned by the diminished pressure on the vessels; yet, under similar circumstances, without the knowledge that caries existed, I should consider the operation justifiable.

It seems to me a question well worthy of discussion whether the best treatment of chronic abscesses without tendency to point is to open them to prevent general tubercular infection, or to risk this danger and avoid the operation through dread of increasing suppu-

ration.

The temperature record from February 17 to April 1 ranged between 99° and 1032° Fahr.

The post mortem examination resulted as follows. On opening the abdominal cavity about a pint and a half of fluid was found within it. The intestines were closely matted together by tubercular inflammation, and slightly adherent; it was difficult to tear them asunder.

The peritoneum of the intestines themselves was thickly studded with typical miliary tu-bercle, and the diaphragm and peritoneum covering it were tightly bound down to the The vessels of the intestines were injected, but the mucous surface of the ileum was free from ulceration. The spleen presented a most unusual appearance; in the parenchyma and beneath the capsule the miliary nodules could be noticed, but in addition discrete vellow masses of cheesy material could be recognized through the capsule, varying in size from a pea to a cherry; composed, however, as an aggregated material. On laying the organ open these could be seen scattered throughout the tissue, but leaving large masses of splenic pulp between them, differing thus from miliary tubercle. Orth speaks of similar masses as a second form in which tubercle is found chiefly in scrofulous persons. The patient's disease of the vertebræ was not traumatic; was it not scrofulous? Orth states that masses of this kind can be lifted out by the forceps without tearing the spleen, differing thus from a similar appearance in certain cases of leucocythæmia, in which instance the masses are adherent, being intimately involved in the structure of the follicles. These masses could be easily raised from their position by means of the dissecting forceps, and I believe them to be large-sized cheesy tubercle.

The liver appeared normal in size, but with an undue proportion of fibrous tissue, evidenced by the well-defined lobulation of the organ. The kidneys were large, weighing nine or ten ounces respectively; the cortical portion appeared swollen to a very marked degree. This is to be observed because no albumen was noticed in the urine during life, save only during the attacks of temporary hæmaturia. Neither liver nor kidneys presented any traces of tubercle macroscopically.

In the sheath of the psoas muscle a collection of pus was detected, which, had life continued, would doubtless have pointed in a few days, having burrowed down to Poupart's ligament. The body of the last dorsal vertebra was involved by caries, and the second lumbar vertebra contained a large sequestrum. The cavity in the body of this vertebra was large enough to contain a lime. The abscess had pointed behind, above the quadratus lumborum muscle. The cellular tissue back of the right kidney was normal, showing no evidences of inflammation.

In the *lungs* miliary and cheesy tubercles were abundantly distributed in the middle and upper lobes, but in the inferior lobes they were only sparsely scattered, much of the parenchyma of the lung containing air, the vesicles being normal. In the apices of both lungs were found small abscesses of simple inflammatory origin as large as a lime. The pleura was much thickened, and the opposing surfaces of the pulmonary and costal pleura contained between their folds recent inflammatory lymph. In the walls of the pleura I found another small abscess containing cheesy pus. Doubtless, during the entire period he was under my care the tubercles had been slowly accumulating, but the physical signs were, I repeat, negative, until about one week before the death of the patient.

Dr. O'HARA said the specimen reminded him of the case of a woman who suffered from spinal caries of the lower dorsal and lumbar regions, and, in consultation with Dr. Willard, an abscess was supposed to exist. A plaster-of-Paris bandage was applied. She had suffered more or less for a period of two years. After the bandage was applied for some weeks, a large abscess pointed under Poupart's ligament. The patient, however, refused any surgical interference. A spontaneous rupture of the abscess finally occurred, and it continued to discharge pus for several weeks, when it ultimately healed. The woman was upwards of sixty years old, and is now in ordinary good health.

Dr. Hodge remarked in reference to the diagnosis of caries of the spine, that he thought that the most delicate test of this pathological condition is the pain produced by motion. Even when no pain is experienced upon pressure along the line of the spine, the patient will be unable to stoop and raise himself again without suffering pain and

without the help of his arms.

Formerly the abscess was left to terminate itself, or the surgeon waited until it was nearly ready to rupture, and then opened it by a valve-like incision. Lately many have advocated the antiseptic method. Dr. Hodge has had very good results in the opening of such abscesses under the carbolic acid spray, as advocated by Mr. Lister, and also by the use of the hyperdistention method of Mr Callender.

Dr. Bruen said the diagnosis of the case during life, in consultation with his colleagues, had been either perinephritic abscess, or abscess in the walls of the abdomen. Though caries was suspected, the idea was dismissed as untenable, because all the symptoms of caries, though looked for, were absent. The abscess would not have been opened had the diagnosis of caries been sustained. The operation was performed to prevent a general tuberculosis by absorption of pus.

The temperature was too high in the evening and too low in the morning to indicate acute miliary tuberculosis. In three cases of this disease that he had previously seen, the temperature had never been over 102° Fahr.; the average being from 992° and 1012° Fahr. until just before death, when there was to 97° Fahr., attended by a profuse sweating. Indeed, his cases were all marked by the frequent profuse sweats. The until just before death, when there was a fall occurrence of frequent profuse sweats. The duration of the lives of these patients was from ten to fifteen days, with very rapid pulse. The reason Wunderlich gives a higher range of temperature in acute miliary tuberculosis he believes to be due to the association of inflammatory catarrhal complications in the cases he has reported. In the patient before us there was evidence of catarrhal inflammation in the lungs, and also the suppuration, to prevent the temperature being typical; nor was there any sweating.

The nerves issuing from the spine at the

position of the caries were not involved in the pathological process, and therefore the symptom of pain was not elicited upon the application of hot and cold sponges along the The electrical current he did not think reached the diseased points. These facts accounted to his mind for the failure of the most reliable tests, but he had no explanation to offer for the absence of pain on movement or when the erect position was assumed. The absence of pain on pressure, retraction of the abdomen, or thickening of the abdominal walls was remarkable, when the extent of the tubercular inflammation is considered

Report of the Committee on Morbid Growths. -" A microscopical examination of a thin section of the spleen demonstrates the whitish nodules to consist of lymphoid cells, with a delicate fibrillar, reticular, intercellular sub-stance. At the centre of the nodules, their structure has undergone a granular metamorphosis, while their periphery retains the ade-noid character. No blood-vessels could be observed in the nodules. The new formations may be considered tubercles experiencing caseous transformation.

" May 22, 1879.

Metacarpo phalangeal and phalangeal joints from a case of rheumatoid arthritis. Pre-

sented by Dr. Louis STARR.

Ann —, æt. 50 years, was admitted to the Episcopal Hospital on December 2, 1878, suffering with acute mania. No history could be obtained. The fingers of both hands were strongly flexed, forming an acute angle with the palms, and were dislocated in the direction of flexion, at the metacarpo-phalangeal joints. The bases of the first row of phalanges rested against the palmar surfaces of the shafts of the metacarpal bones, and the convex, somewhat roughened heads of the latter projected half an inch beyond the dorsal surfaces of the phalanges. The phalanges were crowded together, and their combined breadth was less by half an inch or more than that of the metacarpal bones. Voluntary move-ments were limited to slight, inefficient flexion and extension, and any attempt at further motion caused pain and produced a sensa-tion of moist crepitation. The fingers were abducted; the second and third phalanges were extended, and the joints were stiff. The thumbs were unaffected; their movements, if anything, being more than usually free. The four lesser toes of each foot presented the same conditions as the fingers, though in a less marked degree; the great toes, like the thumbs, were unaffected. There were no evidences of cardiac, pulmonary, or renal dis-Death occurred on December 10.

At the autopsy the metacarpo-phalangeal and the first phalangeal joints of the right middle finger only were examined. Meta-carpo - phalangeal joint—anterior ligament thickened, posterior ligament deficient. Ar-

ticular cartilages entirely absent. Articular facets of bones roughened by osseous protuberances and somewhat eburnated. Protuberances most marked on metacarpal bone. Attempt at a new articular facet on the palmar surface of metacarpal bone behind its head, where the base of phalanx rests: new surface covered with fibrous tissue and red, villous projections. Articular cavity dry. Phalangeal joint—a few red, villous processes from the synovial membrane extending between the articular surfaces; otherwise healthy. Spindle-cell sarcoma of the knee. Present by Dr. H. Lenox Hodge.

This specimen was removed by amputation through the thigh, on March 22, 1879, from a woman 54 years of age. She had never married. Her occupation was that of a schoolteacher. Her general health had always been delicate. She first began to suffer from weakness and pain in the region of the knee, in April, 1877. In May, 1878, she began to use crutches on account of increasing pain in the knee. Since then the pain has become so severe as to confine her to bed and to require the constant use of anodynes. Her general health has been greatly impaired, but there is no evidence of disease elsewhere than at the knee. The operation was done at the Presbyterian Hospital. The following report and examination of the tumor has been made by my friend Dr. Seiler, Pathologist to the Hos-

"PHILADELPHIA, April 4, 1879.

"DR. H. LENOX HODGE: Dear Sir,-On making incisions into the tumor of the knee, I found that the interior was composed of a dark-red mass, having the consistence of a soft clot, extending around the knee-joint under the skin and subcutaneous connective tissue down to about five inches below the head of the tibia, and above to about three inches above the joint. The upper fifth of the tibia was denuded of its periosteum, and the surface of the bone roughened, while small detached pieces of bone were found in the red mass in the neighborhood of the head of the tibia. The patella and the femur were apparently not affected. Several nodules, varying in size from that of a walnut to that of an egg, containing the same dark-red clot-like substance, were found in the tissues adjacent to the central mass. On splitting the tibia and femur lengthwise the medulla of the former presented a dark-red appearance, filling not only the shaft but also the head of the tibia, occupying the place of the cancellated struc-The medulla of the femur appeared normal.

"A microscopic examination of the central mass proved it to be composed of plates of osseous cartilage, connected with each other by a delicate network of fibrous tissue, the meshes of which were filled with red bloodcorpuscles.

"A section made from the periphery of the

mass showed under the microscope small, spindle-shaped cells lying in close contact with each other, having large oval nuclei, while the vessels appeared to be nothing but channels between the cells. The medulla from the head of the tibia exhibited the same character of cells. From these appearances, I would infer that the tumor is a spindle-celled sarcoma, having undergone teleangiectatic degeneration with cartilaginous transformation.

C. Seiler."

#### REVIEWS AND BOOK NOTICES.

AN ATLAS OF HUMAN ANATOMY. Illustrating Most of the Ordinary Dissections, and Many not usually practised by the Student, accompanied by an Explanatory Text. By RICKMAN JOHN GOODLEE, M.S., F.R.C.S.; Fellow to University College; Assistant Surgeon to University College Hospital, and Senior Demonstrator of Anatomy in University College. Philadelphia, Lindsay & Blakiston, 1878. Part I. Large quarto.

This atlas is intended particularly for the medical student, although it will be found useful by the surgeon. The present number comprises four large quarto or small folio plates, each containing two pictures about half life-size in chromo-lithograph, representing dissections about the head and neck. Drawn boldly and with a certain amateurish sketchiness, these plates will not compare for beauty or finish with French or German pictures of regional anatomy, yet for practical purposes they are probably just about as good, beside being quite original.

The "explanatory text" which accompa-

The "explanatory text" which accompanies the atlas is separately printed in the octavo form, and includes a number of smaller pictures. The explanation of the plates themselves is printed with them on loose sheets,

and is convenient for reference.

ESSENTIALS OF CHEMISTRY, INORGANIC AND ORGANIC, FOR THE USE OF STUDENTS IN MEDICINE. By R. A. WITTHAUS, A.M., M.D., Professor of Chemistry in the Medical Department University of Vermont, etc. New York, William Wood & Co., 1879. 32mo, pp. 257.

Omitting all topics not essential to an understanding of those chemical problems which have a direct bearing upon the practice of medicine, Dr. Witthaus directs attention more to the chemistry of therapeutics than to that of pharmacy, while physiological chemistry has been treated of as fully as the limits of the volume will permit. He presupposes a certain acquaintance with the first principles of chemistry and with the elementary chemical manipulations such as may be gained by a few weeks in a chemical laboratory. A beginner entirely ignorant of chemistry would

probably not be able to understand this book, but the medical student of a first-class college, or the practitioner who desires to furbish up and add to his stock of practical information on chemical subjects, will find this an admirable book for the purpose. It has been thrown into the catechetical form, which gives directness and force to its teachings, and in looking over it one is constantly struck with the desire of the author to preserve its scientific character while constantly giving it a practical direction. Not taking the place of larger works, it can confidently be recommended within its self-imposed limits.

THE PHARMACOPŒIA OF THE BRITISH HOS-PITAL FOR DISEASES OF THE SKIN, LON-DON. Edited by BALMANNO SQUIRE, M.B. Lond., Senior Surgeon to the Hospital. London, J. & A. Churchill, 1879. 16mo, pp. 80.

Mr. Squire's practical mind constantly leads him to devising new methods for the cure of skin-diseases. In the present instance we are indebted to him for a series of well-arranged formulæ which have stood the test of trial at the Skin Hospital. Besides the formulæ, there are certain useful directions for the employment of baths, caustics, etc., which make this little volume a useful one for the general practitioner as well as the specialist.

PHOTOGRAPHIC ILLUSTRATIONS OF SKIN DISEASES. By GEORGE HENRY FOX, A.M., M.D., Clinical Professor of Dermatology, Starling Medical College, etc. Part I.: Comedo. Acne vulgaris, Lepra tuberosa, Elephantiasis; Part II.: Keloid, Rosacea, Psoriasis nummulata, Ichthyosis simplex. Quarto. New York, E. B. Treat, 1879.

Dr. Fox's work is intended, when completed, to comprise "forty-eight colored plates taken from life." Among these will be found all the chief affections of the skin portrayed from typical examples, and, so far as we may judge by the specimens before us, these will be as perfect as the limitations of the photographic method will permit. That this method is suitable for the representation of all diseases of the skin, we cannot concede. There are many gradations of tint which are dependent upon the reflection of light from moist and dry, from rough and smooth surfaces of varying translucency, which it is difficult enough for an artist with a wide range of colors on his pallet to catch. When, however, it is attempted to give expression to these by means of a photograph, it is like playing a tune on one string; we have but two expressions, light and shade, to convey all the gradations of color contained in a great variety of lesions.

As a consequence of this, we find that in those diseases, as elephantiasis, where form is important, the affection is well represented, while in such affections as eczema vesiculosum or rubrum the photograph fails to give us a clear notion of the characteristic features presented. The pictures thus far published by Dr. Fox are such as can best display the advantages of photography, and we may say that in general they are most admirable. We may call attention in particular to the pre-raphaelite delineation of comedo, where the characteristic coarse, greasy skin of the subjects of this disease is wonderfully depicted. Taken as a whole, these photographic illustrations fill a want, and to the teacher especially must be useful. The letter-press, we may add, is clear and practical.

A. V. H.

ATLAS OF HISTOLOGY. By E. KLEIN, M.D., F.R.S., Lecturer on Histology at St. Bartholomew's Hospital Medical School, and E. Noble Smith, L.R.C.P., M.R.C.S., late House-Surgeon to St. Mary's Hospital. Part IV. Philadelphia, J. B. Lippincott & Co. London, Smith, Elder & Co., 1879. Quarto.

The present part of this atlas treats of bone tissue. Three plates are given, including some twelve distinct pictures, representing sections of bone in various conditions, and with different microscopic amplification. Most of these are colored after the stainings used. The letter-press gives an account of the formation and structure of normal bone.

DISEASES OF THE INTESTINES AND PERITONEUM. By JOHN SYER BRISTOWE, M.D., J. R. WARDELL, M.D., J. W. BEGBIE, M.D., S. O. HABERSHON, M.D., T. B. CURLING, F.R.S., and W. H. RANSOM, M.D. New York, Wm. Wood & Co., 1879. 8vo, pp. 243.

This volume of "Wood's Library of Standard Medical Authors" is taken from the third volume of Reynolds's Practice of Medicine, which, with the authors' names, is a sufficient guarantee of its practical value. The various diseases are treated with a fair degree of fulness, and this book is not among the least valuable of the series to which it belongs.

AN AGREEABLE MEMORIAL. — The committee of arrangements who carried out so admirably all the details of the complimentary dinner recently given to Professor Gross, in commemoration of his fifty-first year in the profession, have issued a memorial volume containing a full report of all the proceedings connected therewith. This has been printed in very handsome style, and prefixed with an admirable and speaking likeness of the Honored Guest. Aithough primarily intended for those immediately connected with the complimentary dinner, a limited number of extra copies have been struck off for general circulation. These may be obtained at Messrs. Lindsay & Blakiston's; price, \$1.00.

### GLEANINGS FROM EXCHANGES.

ENORMOUS HYPERTROPHY OF THE MAMMÆ. -The Proceedings of the Academy of Science of Montpellier contain an account of the following remarkable case. Rosine M., born in 1844, who had not menstruated up to the age of 15, was washing in the river, being, according to the custom of the country, immersed to her waist, when the menstrual flux first appeared. From this time her breasts began to increase in size so rapidly that she was obliged to cease work. When she consulted Dr. Monteils the mammæ were so large that they were supported in her lap while sitting. They caused curving of the vertebral column and displacement of the scapulæ. The circumference of the right breast was nincty-four centimetres (thirty-seven inches), that of the left one metre and five centimetres (forty-two inches); the pedicles were smaller. The right breast extended eight centimetres (three and The right one-fourth inches) below the umbilicus, and the left breast thirteen centimetres (five inches). The hypertrophy was glandular as well as adipose. The girl seemed worn out with the weight of these masses, but refused operative relief. In 1869, at the age of 25, she was married, and from that moment her breasts commenced appreciably to diminish in volume. She has given birth to three children, and in 1876 was pregnant with a fourth. The right breast at that time was twenty-seven centimetres (ten and three-fourth inches) in circumference, the left thirtythree centimetres (thirteen inches). She was healthy and strong. A fuller account will be found in the St. Louis Medical and Surgical Fournal for May, 1879.

SUTURAL JUNCTION OF A DIVIDED ULNAR NERVE.—At a recent meeting of the Clinical Society Mr. Hulke read notes of a case of sutural junction of the ulnar nerve fifteen weeks after its complete severance by a roofing-slate; early restoration of function. The patient, a blacksmith, aged 53, was struck across the inner side and front of elbow by a slate dislodged from a roof. Fifteen weeks afterwards all parts supplied by the ulnar nerve in the hand were numbed and cold, and the scar in front of the elbow was exquisitely tender. The patient was then chloroformed and an Esmarch's bandage put on. The ulnar nerve was exposed at the elbow, and found to be completely divided and the two ends widely separated. The upper end was bulbous and was dragged out of its course by the cicatrix; the lower end was shrivelled. In both ends were minute particles of slate imbedded. Both ends were removed by clean transverse sections, and were then found to be threequarters of an inch apart. In order to bring them together the upper end was stretched and drawn down, and joined as closely as possible to the lower one by four silk sutures passed through the sheath. Absolute contact

was not obtainable. The operation was done and the wound afterwards dressed antiseptically. The neuralgia ceased at once, and did not recur, and in less than six weeks the patient returned home. Sensation, which had begun to return about a month after the operation, rapidly increased, so that upon leaving the hospital the man went at once to his work.

—Lancet, May 24, 1879.

HYDATID OF THE SKIN.—An example of this rare condition was presented by Dr. G. Schiff to the K. K. Gesellschaft der Aerzte, in Vienna, on the 18th ult. The patient was a man 30 years of age, who for about a year had suffered from scattered roundish movable tumors in different parts of the skin. They varied in size from that of a pea to that of a hazel-nut. They were uniform, presenting no lobulation, and the skin over them was normal. These characters distinguished the tumors from fatty, fibroid, and atheromatous growths. The diagnosis of hydatids had been made by Professor Auspitz, and the examination of one of the tumors, which was excised, proved the opinion of their nature to be correct. The patient had also suffered from muscular tremors and epileptic attacks since an attack of typhus in his tenth year. The same diagnosis was ventured on a second case, but excision of one of the tumors showed them to be fatty.-Lancet, May 24, 1879.

UNUNITED FRACTURE. - A hypodermic injection of glacial acetic acid (M. v-x) between the ununited ends of the bone is highly recommended by Mr. Fitzgerald, Surgeon to the Melbourne Hospital, in the treatment of ununited fractures. At first it is attended by very sharp pain; this rapidly subsides. In this surgeon's hands this treatment has been uniformly successful.—Hospital Gazette.

"Tully's Powder" (originally called Tully's Dover's Powder).—Sulphate of morphia, one part; camphor, in fine powder, twenty parts; precipitated chalk, twenty parts; powdered liquorice-root, twenty parts. This is the original formula of Dr. Tully, furnished

by Mr. Wood, of New Haven.

# MISCELLANY.

THE committee appointed by the London Clinical Society to investigate what deleterious effects follow the prolonged and continuous use of chloral in ordinary doses have not yet reported, and are waiting to collect a larger quantity of information. The report when made will, doubtless, crystallize the nebulous opinions on the subject which have been prevalent, and will present their conclusions in a shape to make them useful to the pro-

LIVERPOOL will not be outdone by London. There plaster of Paris was sold as flour, but at Liverpool one thousand and seven bags of rice-meal have been seized, which were found

by the public analyst to contain fifty per cent. of ground marble, granite, and lime.

DISEASED PIGS FROM AMERICA AT LIVER-POOL.—A cargo of pigs which lately arrived in the Mersey from Philadelphia was detained on suspicion that some of the animals were suffering from typhoid. After a veterinary inspection all were ordered to be slaughtered. -Med. Times and Gazette, May 31.

THE English doctors, at least those living in the country, have recently taken to riding about on bicycles and tricycles to see their These velocipedes are now made with rubber tires, and can travel over tolerably rough roads and up and down steep hills, making from eight to ten miles an hour.

#### \_\_\_\_ OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY FROM JUNE 29 TO JULY 12, 1879.

McKee, J. C., Major and Surgbon, Medical Director.

-Leave of absence extended fifteen days. S. O. 74,
Department of Arizona, June 25, 1879.

WHITE, C. B., MAJOR AND SURGEON.—When relieved, to proceed to New York City, and, on arrival, report by letter to the Surgeon-General. S. O. 150, c. s., A. G. O.

STERNBERG, GEORGE M., MAJOR AND SURGEON.—Relieved from temporary duty at Washington, D. C., and to report in person to the President of the National Board of Health for duty with the "Havana Commission." S. O. 153, A. G. O., June 30, 1879.

STORROW, S. A., MAJOR AND SURGEON, Fort D. A. Russell, Wyo. T.—The order granting him one month's leave is revoked, and he is granted leave of absence for one month on Surgeon's certificate of disability, with permission to leave the Department. S. O. 54, Department of the Platte, June 25, 1879.

JANEWAY, J. H., MAJOR AND SURGEON.—Assigned to duty, temporarily, as Post-Surgeon at Fort Columbus, N. Y. H., in addition to his duties at Fort Wood. S. O. 105, Department of the East, June 30, 1879.

Notson, William M., Major and Surgeon.—Relieved from duty with Army Medical Board, in session in New York City, and assigned to duty as Post-Surgeon at Columbus Earracks, Onio, relieving Surgeon C. B. White. S. O. 150, c. s., A. G. O.

GIBSON, J. R., MAJOR AND SURGEON.—Granted leave of absence for four months. S. O. 150, A. G. O., June 26,

CARVALLO, C., CAPTAIN AND ASSISTANT-SURGEON.—Granted leave of absence for six months. S. O. 150, c.s., A. G. O.

KIMBALL, J. P., CAPTAIN AND ASSISTANT-SURGEON. — Relieved from duty at Fort Columbus, N. Y. H., and assigned to duty as Atteiding-Surgeon at the Headquarters, Military Division of the Atlantic and Department of the East. S. O. 105, c. s., Department of the East.

CLEARY, P. J. A., CAPTAIN AND ASSISTANT-SURGEON.— Granted leave of absence for five months. S. O. 157, A. G. O., July 7, 1879.

Munn, C. E., Captain and Assistant-Surgeon.—Granted leave of absence for four months. S. O. 159, A. G. O., July 9, 1879.

July 9, 1879.

Paulding, H. O., First-Lieutenant and Assistant-Surgeon. — Now awaiting orders at Washington, D.C. Assigned to temporary duty at Fort McHenry, Md., relieving Assistant-Surgeon W. B. Brewster. S. O. 160, A. G. O., July 10, 1879.

Brewster, W. B., First-Lieutenant and Assistant-Surgeon.—When relieved, to report by letter to the Surgeon-General. S. O. 160, c. s., A. G. O.

Drs. John J. Kane, J. M. Banister, William B. Brewster, Aaron H. Appel, Charles Richard, and W. F. Carter, having been found qualified by the Army Medical Board, in session in New York City, have been appointed Assistant-Surgeons U. S. Army, with the rank of First-Lieutenant, to date from June 3, 1879.

# PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, AUGUST 2, 1879.

#### ORIGINAL COMMUNICATIONS.

FRACTURES INVOLVING OR AP-PROXIMATING THE ELBOW-JOINT.

> BY OSCAR H. ALLIS, M.D., Surgeon to the Presbyterian Hospital.

Read before the Philadelphia County Medical Society, April 9, 1879.

ENTLEMEN,—About three years ago I published in the Medical and Surgical Reporter\* an article under a title similar to that of my present paper. article was read by some of my friends. with whom I have discussed the more important points, and has further had the effect of bringing to my notice deformities like that pointed out in the original paper. I am thus at the outset happy to state that a larger experience has confirmed the correctness of the views there set forth, while the importance of the subject and the peculiar interest manifested in it by the general medical profession sufficiently warrant me in bringing the subject before this Society at this time.

Let me first, then, call the attention of the Society to the peculiar deformity to which I allude. By reference to Fig. 1—



left arm taken from a photograph—a peculiar angular deformity will be observed, which, when compared with a sound arm, and especially in a thin, ill-developed arm,

is very striking.

This deformity, which has been noticed so frequently by physicians in the present and past generations, is due to the splints used during the repair of the joint, and hence I propose to note the anatomical peculiarities of the joint, and to show why the manufactured splints are so uniformly productive of mischief.

The elbow presents the best example of a hinge joint. There is, in fact, but one motion enjoyed by this articulation, and

that is the one of flexion and extension. To the freest motion of flexion and extension none of the ligaments of the joint offer any obstacle, but when any attempt is made to move the forearm laterally upon the arm, then the function of the lateral ligament is manifest. The joint is mainly made up of two bones,—the humerus and the ulna,—and these two bones bear the fixed and constant relation to each other that the two leaves of a hinge or pages of a book bear to each other. But, while the joint is a hinge, the two bones that mainly constitute it do not, like the leaves of a hinge, lie in the same plane or in the same direction. If we cast the eve along the humerus in a ligamentous preparation, we shall see (Fig. 2) that the ulna curves ab-



ruptly towards the outer surface of the humerus, so that if a line is projected along the shaft of the humerus it will fall far below the carpal extremity of the ulna. This deflection of the forearm from the arm corresponds to a similar deflection between the bones of the thigh and leg, and, as it is a law of nature, is the most beautiful and useful position of the limb. This angular junction of the bones of the arm and forearm, thigh and leg, is most manifest when the limbs are extended, and disappears when the limb is flexed at a right angle.† It would thus appear that when the arm is bent at a right angle it is in the most favorable position for a cure without deformity. Although this be admitted, and knowing that teaching and practice have always been to splint the arm at a right angle and place it in a sling by the side of the chest, still it is a fact which no one of experience will question that deformity too generally follows injury in this locality; and this deformity is due to the kind of splint used, and the manner in which it is used. I am careful to state that part of the injury may depend upon the manner in which the splint is used, for the mere fact that a splint bearing the name of a surgeon maintains its

<sup>†</sup> This feature was called to my attention by Dr. J. M. Barton, of this city,—a point of which I was unaware when my first article was written.

popularity long after the decease of the surgeon, and, I might add, long after his writings and works have been shelved, is potent evidence of intrinsic worth.

The first splint that I shall examine is the one known as the internal lateral splint, represented by Fig. 3, and too



familiarly known to require explanation. This splint is adapted to the inner aspect of the humerus, and the inner condyle is protected against pressure by a round hole in the splint. The forearm and hand rest upon the splint in a state between pronation and supination, and when the limb is dressed it may be carried by the side, and really appears to meet every indication. But it must be borne in mind that in fractures involving or approximating this joint the lateral security is no longer present, and that the arm can be made to adapt itself to the splint. If now we place this splint upon the limb and examine it, we will see (Fig. 4) that the upper part of the

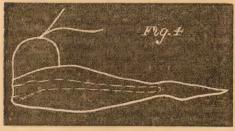


Fig. 4 represents the arm and forearm elevated nearly to Fig. 4 represents the arm and forearm elevated nearly to a level with the shoulder and bent at right angles, ready for the application of the internal lateral splint. It must be evident that the ulna will find no support in the splint, and hence when a bandage binds the forearm to the unyielding splint, the ulna will, in case of fracture involving the joint, be drawn to the splint, and when repair is complete the deformity seen in Fig. 1 will ensue.

ulna is not supported, and the application of a bandage will draw this arched portion of the ulna down towards the splint. could not draw it down if it were not for a fracture in or about the joint; but when either condyle is fractured, or a fracture occurs above the condyles or between them, or when it occurs in the upper part of the ulna, then a bandage applied along the wrist and forearm exerts a powerful leverage upon the part, and draws the vielding broken bone to the fixed and unvielding splint.

The same objection may be made to the anterior angular splint. The two arms of the splint do not lie in the same planes as the humerus and ulna do, and hence, when used in case of fracture, the splint, being wood and unvielding, cannot be adapted to the limb. The limb is and must be more or less under the control of the splint, and, when the cure is complete and the two arms are compared, a deformity will almost invariably ensue.

What I have said of these splints I apply. with almost equal justice and earnestness, to every manufactured splint. I am careful to emphasize the word "manufactured," for many reasons. The wooden manufactured splints cannot be made for all ages. —from early childhood to maturity,—and. if they could, no physician would carry such a stock to be ready for all emergencies. But even had he the splints for every age, yet it is quite as important that the splint should be adapted to the condition of the limb,—i.e., thin, muscular, or plump, or swollen; and hence so much judgment is necessary in meeting every condition, that when I have a fracture of this region to care for I never use manufactured splints. I prefer to use splint material, and to construct for each case a dressing best suited to its needs.

Of splint material there is an abundance now to choose from. Felt\* and binders' board can be adapted to the part, after having been dipped for a few moments in boiling water, and, when they dry and harden, become a splint superior in every respect to the best manufactured splints in the market. Besides these, there are so many well-known preparations† which harden in a few hours, that one can hardly

<sup>\*</sup> The only parties that are now manufacturing felt for the accommodation of surgeons are C. & J. Pierce, of Bristol, Bucks County, Pa.

† One of the most convenient is the white of eggs and flour.

To be of the most convenient is the white of eggs and flour. Take the whites of two eggs and beat into them flour until it forms a glutinous paste; this when applied to muslin will soon harden, and can be made of any desired firmness and strength by repeated layers.

Another that may be kept on hand and ready for use is:

Gelatin (in small pieces) . 7 ounces.

Water

Dissolve with gentle heat, and add Alcohol

This will dry in about two hours, and becomes stiff and

Starch, glue, a solution of shellac in alcohol (often styled shellac varnish), plaster of Paris, silicate of soda, are or have been employed for this purpose.

imagine a circumstance in which the oldfashioned but still patronized wooden

splint would be necessary.

It is not possible to lay down a set of rules, let them be ever so elaborate, that will meet every case. In every department of medicine it is the part of wisdom to meet the indications; to assist nature. In offering, then, some remarks upon the dressing of this peculiar deformity, I must not be regarded as issuing a dictum; I desire merely to call attention to a course of practice wholly, in some respects, adverse to popular teaching; not to show that the time-honored custom is wrong, but rather to show that a deviation from it may at times be safely followed. Two points in the usual practice of dressing injuries of the elbow-joint I wish to call attention to: 1st, the use of an angular splint; 2d, early passive motion, to prevent anchylosis.

The Use of an Angular Splint.—I have already called attention to the angular splint, and to my reasons for believing that its use has been productive of deformity. Hence I abandoned it from the outset, and in the first case that presented itself to me in my service at Howard Hospital,\* after carefully ascertaining that I had a fracture of the internal condyle, in a little girl about 4 years of age, I took the arm, placed it in an easy extended position, and compared it with the sound arm. Now, while thus extended in a position most favorable for the detection of any deformity, I encased the elbow, arm, and forearm with strips of adhesive plaster. This done, the little child was dismissed, with the arm extended, encased with adhesive plaster at the elbow, but free at the wrist and hand, and swinging freely from the shoulder. In other words, I merely secured the elbow, making it immovable without interfering with any other functions of the limb. As this was an experiment, I felt it my duty to watch it closely, and gave the mother the strictest direction to call upon me immediately in case of crying or any expression of pain or uneasiness in the part.

The dressing was well borne; the position did not seem prejudicial to the case; the slight swelling subsided; and she permitted me, in a few days, to handle (gently pinch or press) the part without evincing pain. No swelling of the hand followed

the application, and in a few days the child was playing around as if nothing had occurred. I did not remove the dressing for six weeks, and when I did there was as free, painless, and extensive motion at the joint as could be desired, and, what was quite as gratifying, no deformity.

From that day to the present I recall but a single fracture in this vicinity that I have not treated in the extended position.† Some of them I have treated with no other support than strips of adhesive plaster: others with adhesive plaster supplemented with thin, well-soaked pieces of pasteboard or binders' board; while still others I have treated with material that soon hardened. A favorite dressing is as follows. With the arm in an easy, extended position, I envelop the elbow with cotton or some soft and yielding material, and around this apply a bandage. I do not consider it ever safe to apply the bandage directly to the skin when any hardening material is to be applied. I have tried it too often, and invariably to the detriment and hazard of the part, ever to resort to it again. Having encased the part in cotton, a bandage is applied, and the degree of firmness of its application will be measured by the amount of cotton about the part. After a single layer of bandage has been applied, and the cotton covered in, then the hardening material-white of eggs and flour, plaster of Paris, etc.—may be applied; over this a second layer of bandage, which will usually become, when dry, of sufficient firmness to act as a splint throughout the remainder of the cure. This will harden in a few hours; and should there arise any indication for removing it, it can easily be slit up longitudinally, thus making one or, if preferable, two perfect splints, which will serve during the remainder of the cure. If, however, there does not arise any indication for removing it, the dressing may be left undisturbed for a week or more, when it will become loose; and then, cutting it into halves, the arm may be dressed daily if desired, and

<sup>\*</sup> Surgical Dispensary Service, Howard Hospital, 1518 Lombard Street.

<sup>†</sup> This was a case of fracture of the internal condyle and luxation backward of the ulna, in a little girl about 5 years of age, a patient in the care of Dr. W. H. Parish, with whom I saw the case. The elbow was greatly swollen, and the diagnosis ascertained under ether. The arm was dressed at a right angle, to prevent a tendency of the humerus to shoot forward, and in the bend of the arm a large pad of cotton was retained by a bandage. The limb was treated for the most part on a pillow, with a sling for the hand. The result was most gratifying, both in respect to absence of deformity and early functional activity.

these reapplied with a bandage external to

I desire here to state that many acquire a very faulty idea of the use of the bandage in its application to fractures. often thought that if the fractured ends of the bone move they will not unite, and hence they must be firmly bound together by splint and bandage; that a pad or compress must always be placed over the fractured bone, and that the bandage must secure it from re-displacement. There is a grain of truth in both these statements, but it is possible to give it too great prominence. In fractures of the condyles there is often no displacement, and hence no demand for either a strong splint or a tight bandage.

If it is preferred to place the arm at a right angle by the side during the cure, a starch or plaster dressing may be just as readily applied. All I especially desire to state is, that if the arm is placed in a natural position, and while in this position a dressing is applied that will harden and give it an easy natural support, one may confidently expect a good result without

deformity.

One word in reference to the manufactured splints. I consider the posterior angular (i.e., the wire trough) the best. This should be large, roomy, and well cushioned with lint or cotton. Let this be used rather as a rest and protection to the part than as a splint. If the anterior angular or internal angular splints are used, let them be very loosely applied. believe, however, with their use some deformity will almost invariably follow, and hence I cannot too earnestly recommend their rejection.

In my remarks thus far I have had special reference to fractures as they occur in children, and when these take place in healthy children they are usually followed by a mild and tractable degree of inflammation. They are usually due to a slight fall, and often do not present deformity. It is in this mild variety of injuries that I place the arm in the extended position, apply my dressing, and leave it (when no counter-indications arise) two or three, or even four, weeks without removing it. But I do not lay this down as a rule. I find the injury more extensive; if the person has fallen from a considerable height, or been projected with great force, and the elbow greatly swollen, then the

condition changes: then, having ascertained the extent of the injury (under an anæsthetic if necessary), and having reduced the fracture or injury, I put my patient to bed, -whether child or adult, -and direct my attention first to assuaging the necessarily great inflammation. In such cases I place the arm (in a position most comfortable to the patient) upon a pillow or broad, well-cushioned board, and apply to it lead-water and laudanum. I do not usually, in the height of this stage, use any splint whatever. At the end of a week or so, when the arm will permit of a more careful dressing, I usually make a second careful examination, under ether, before applying a felt or pasteboard dress-

Early Passive Motion, to prevent Anchylosis.—As the cure advances, the question of function assumes prominence, and, as a rule, early passive motion has the sanction of the schools and text-books. It is not possible, upon this head, to lay down definite rules, but if I were obliged to do so, I should say that no motion of the joint should ever be permitted during the four weeks immediately subsequent to the My reasons are simply these. If the accident has been just sufficient to produce the fracture, without doing much damage to the soft parts, there is no likelihood of much inflammation, and repair will be prompt and satisfactory if nature's course is not interfered with. If, on the contrary, the injury is of the graver sort, and early, excessive, and long-continued inflammatory action ensue, then I hold that during at least the four weeks immediately subsequent to the injury it is good surgery to direct one's attention to combating, subduing, and limiting the morbid process. If it were necessary, I could adduce cases treated by the most eminent surgeons, where every effort had been made to regain the early use of the joint, and where passive motion most judiciously employed was of no avail whatever. I trust in this I shall not be misunderstood. I desire most of all to assert is that the above has been my course; that I have treated at least a dozen cases of fracture in this region, and not in a single one have I resorted to passive motion during the entire cure.

Persons who have had experience in fractures will not be influenced by the remarks of others. It is not to these, but

to the inexperienced, that I would state again the principle that has guided me.viz, in the milder cases you will have no trouble unless you become too anxious and too officious. In your graver cases you must not hope for better success than crowns the efforts of our ablest surgeons: and if you examine their writings you will find that in some cases the function is not regained for many months. It is in this class (i.e., the severer injuries of the joint) that one is inclined to become apprehensive of anchylosis, and to resort to early passive motion; but I am forced to the conclusion, from my own experience, from the experience of others with whom I have discussed this subject, together with the recorded experience of our ablest writers. that no good comes from passive motion earlier than the fourth week, while to resort to it when the inflammation is at its height is neither good surgery nor good sense. A certain number of this class will be followed by muscular rigidity,plastic stiffening, a sort of painful anchylosis,—but this need not lead to alarm. It may require six months or a year to regain the function of the part, but this has been the fate of patients in the hands of the most skilful surgeons, and the lesson should not be lost sight of.

In regard to passive motion, let me add one word. The expression is well chosen, and if the term is understood the patient can scarcely ever suffer from it. See that the patient is passive; that he gives himself wholly into the surgeon's hand, while the latter institutes gentle, slow, and painless movements. Many a healing and painless joint has been retarded and rendered painful, swollen, and aggressive, by misunderstanding the meaning of the term passive. If early motion, then, is ever resorted to, let it be passive in its fullest,

truest application.

In conclusion, let me say that it is scarcely within the limits of a single paper to discuss a subject of such importance in all its bearings. I have brought forward two points that may seem at variance with established usage, not to advocate their employment, but rather as facts. When I say that I have set at least a dozen elbows in the straight or extended position, the fact at least will be of some comfort to one who never resorted to this position if circumstances compel him to do so; and when I say, in addition, that in not one

of the twelve did I resort to passive motion during the cure, I am stating that which should lead those who claim immunity from anchylosis to early passive motion to reflect upon nature's own resources, and to give her some credit for redeeming the joint, instead of taking it all to themselves.

1604 SPRUCE STREET, PHILADELPHIA.

THE ACTION OF BRUCINE AND STRYCHNINE ON THE MOTOR NERVES.

BY B. F. LAUTENBACH, M.D.

In No. 293 of the *Medical Times*, Mr. Robins presents some experiments on the action of brucine on the motor nerves, and alludes to experiments made by Dr. Klapp with strychnine, which seem to indicate that the motor paralysis observed after poisoning with the latter substance is due to its being contaminated with brucine.

During the last few months I have made upwards of a hundred experiments on the influence which these two alkaloids exert on the nerves of frogs, and have come to conclusions differing very much from those obtained by the above-named investigators.

#### BRUCINE.

Mr. Robins found that when he injected one centigramme of this substance into a frog tetanus resulted in a few minutes, and death (?) within ten or eleven minutes.. If now the sciatics were irritated he found that they would no longer respond with the highest power of his battery. Experiments on mammals gave similar results.

These experiments, however, do not prove that this substance in the dose employed directly paralyzes the motor nerves. It is well known that the neurility of a nerve can be destroyed by the strain put upon it by a series of tetanic impulses, and this can easily explain the want of excitability of the motor nerves after an injection of brucine. In some experiments I cut out the heart of the frogs so as to prevent all circulation, and then brought a solution of brucine, acidulated with acetic or hydrochloric acid, on the exposed spinal cord. After a varying period of time tetanus resulted, and when this ceased the motor nerves would no longer respond to the strongest currents (induction apparatus of Gaiffe with two bichromate cells).

Again, when saponin, a substance which is absorbed with great difficulty, is injected into the medulla oblongata of a frog, tetanus immediately results. This lasts at the most three minutes, yet the motor nerves will be found to have become inexcitable to all manner of irritation. It could be shown in many other ways that the excitability of motor nerves can be reduced to zero by producing tetanus through chemical or mechanical irritations of the nervous centres, but the above will suffice.

How then are we to determine whether or not a substance which produces convulsions at the same time directly affects the motor nerves? One method for determining this is that employed by Kölliker in his experiments on strychnine. It consists in destroying the communications of the nerves of one leg with the centres, and then giving the substance under investigation. If the failure of the nerves to respond to irritants is due to a direct action on these structures, this operation will in no way change the result; but if it be due to exhaustion through tetanus, the cut nerve will continue to respond to irritants applied to it when the other nerves have ceased to do so. This method was adopted by the author in a number of experiments made with brucine.

The solution of the alkaloid employed in these experiments was similar to that used by Mr. Robins, i.e., .or gramme of brucine to I centimetre of water acidulated just sufficiently with absolutely pure acetic acid to produce a solution. The frogs used were, unless otherwise stated, of the temporaria variety, and weighed from 40 to 65 grammes. The roots of the sciatic nerve were cut at their exit from the spinal column. To prevent suffering, the cerebrum was destroyed in every instance before the experiment was commenced.

Experiment I.—Rana temporaria. Cut right sciatic nerve. At 10 A.M., I c. cent. of the solution was injected into the lymph-sac of the back. 10.21 A.M., tetanus in all parts of the body except in the right leg and foot; 10.50 A.M., the tetanus has ceased. 12.55 P.M., minimal contractions are produced from the right sciatic, when the distance between the bobbins of the induction apparatus is 15½ centim. From the left sciatic contractions first occur at  $7\frac{1}{2}$  centimetres.

first occur at  $7\frac{1}{2}$  centimetres.

Experiment IV.—Rana temporaria. Cut right sciatic nerve. At 1.14 P.M., 1 c. centim. of the solution was injected under the skin of

the thorax and abdomen. At 1.51 P.M., tetanus. 6 P.M., tetanus can still be produced by succussions. 9.30 P.M., the animal appears to be dead, but circulation continues. The right (cut) sciatic responds to very weak currents, while the left fails to respond to the strongest current.

Experiment VII.—Rana temporaria. Cut right sciatic nerve. At 4.26 P.M., 2 c. centim. of the solution was injected under the skin of the back. 4.54 P.M., tetanus. 5.30 P.M., all movements have ceased. 5.37 P.M., both sciatics respond to the induction current with the

bobbins at 111 centim, distance.

Experiment VIII. — Rana temporaria. Right sciatic nerve cut. 4.24 P.M., 2 c. centim. of the solution was injected under the skin of the back. 4.40 P.M., long-continued tetanus. 5.20 P.M., all movements have ceased. 6.30 P.M., neither sciatic responds to the strongest induction currents.

Experiment XIV.—Rana temporaria. Cut left sciatic nerve. At 10.07 A.M., injected 4 c. centim. of the solution under the skin of the back and abdomen. 10.30 A.M., long-continued tetanus. 11.00 A.M., all movements ceased. 11.30 A.M., both sciatics failed to respond to the strongest currents.

The above-given experiments are examples taken from a long series of similar ones made by the author. The weight of the five frogs was between 50 and 55 grammes each. All were treated alike with the same solution of the poison, yet we find essential differences in the action on the motor nerves.

In Experiment I., the excitability of the non-cut nerve was much less than that of the cut sciatic, which if anything was above normal. In Experiment IV., the excitability of the non-cut nerve was abolished, while that of the other side remained about normal. These two experiments show that brucine in a moderate dose (1 part to 5000 parts the weight of the frog) does not paralyze the motor nerves through a direct action on these structures; but it can have this action indirectly through the "tetanic exhaustion" of the nerve.

In Experiments VIII. and XIV., larger doses were employed, and we have abolition of the electric excitability of the cut nerves as well as of those not cut. This shows that in very large doses (1 part to 1000 or 1500 parts of the weight of the frog) the drug can produce motor paralysis through a direct action on the nerves. This action, however, does not occur (see Experiment VII.), unless the dose be excessive, for several hours after the poisoning has taken place.

In still another manner I was able to prove that when brucine reaches the motor nerves in a sufficiently large quantity these structures are paralyzed. The method consisted in ligating the uppermost portion of the thigh of a frog just tight enough to prevent circulation in the ligatured leg. der these circumstances, the nerves are for a number of days still able to transmit impressions to and from the centres. In frogs thus prepared one half cub, centim, of the brucine solution was injected under the skin of the ligatured leg, great care being taken that the injection did not reach the nerve. Under these circumstances, the general symptoms of brucine-poisoning of course failed to occur, and only those which resulted from its diffusion in the ligatured leg were possible. The symptoms observed were, at first, loss of all sensibility except that for touch: later this also disappeared, as did the mobility of the extremity. Electrical irritation of the sciatic nerve failed under these circumstances to elicit any response.

Experiment XXIII.—Rana temporaria. Tied right leg, and at 10.15 A.M. injected ½ cub. cent. of the solution under the skin of the ligatured leg. 11.00 A.M., sensibility to acids and the hot iron gone in the tied leg. Movements still occur in this extremity. At 1.30 P.M., movements no longer occur in the ligatured leg. Electric excitation of the sciatic nerve of the poisoned ligatured leg produces no movements.

Experiment XXVII.—Rana temporaria. Tied both hind legs. 3.10 P.M., injected ½ cub. cent. of the brucine solution under the skin of the left leg. 4.20 P.M., the sensibility for acids and hot iron had disappeared. Touch causes movements in the same leg as well as in the rest of the body. The next morning, movement was abolished in the injected leg, while in the other ligatured leg the sensibility and mobility were unimpaired.

Considering the large dose of the drug necessary (2 to 4 centigrammes) to produce motor paralysis in frogs, we certainly cannot consider this paralysis other than as a possible symptom of brucine poisoning. A similarly large dose of almost any soluble salt would have a like effect.

Curiously enough, there is a salt of the alkaloid under consideration which produces, in at least one species of frog, as its almost sole symptom, paralysis of the motor nerves. About two years ago, Prof. D. Mounier presented to the Society of Physical and Natural Sciences of Geneva

the results of his experiments made with brucine which had been treated with hydrochloric acid. Frogs in whom he injected this preparation passed into a state resembling that produced by curare, without tetanus being produced. The motor nerves when examined electrically were found to have lost their excitability. Experiments which this investigator made with other salts of brucine failed to give similar results.

Having obtained some of Prof. Mounier's chloride of brucine, I repeated his experiments, but failed absolutely to confirm his results. Tetanus was always produced, and the symptoms of "curarization" were conspicuous by their absence. Knowing my preparation to be good, this result was surprising; but the correct explanation soon offered itself. Prof. Mounier's experiments had been made on Ranæ esculentæ, while mine were made on Ranæ temporariæ. With due deference to the opinion of the great German physiologist, who says, "Frosch ist Frosch" under all circumstances, I know that results obtained in experiments made on the nervous system of the one species of frog give no reason to believe that the same experiment will give the same result when the other species is used. For example, it is only necessary to observe the difference in the action of caffein and of dry heat in the two species of frogs.

Recently I was able to obtain some Ranæ esculentæ, and repeated the experiments. These frogs showed the curare symptoms just as they were described by Mounier. The chloride of brucine therefore acts like strychnine in the Ranæ temporariæ, and like curare in the Ranæ esculentæ.

#### STRYCHNINE.

In the Journal of Nervous and Mental Disease for October, 1878, Dr. Klapp readvances the theory of Kölliker, that this alkaloid fails to affect the motor nerves. His paper is, unfortunately, entirely inaccessible to me, and I have only seen very imperfect extracts from it. From these, it appears that Klapp explains the different results obtained by the previous experimenters, on the supposition that the strychnine which they employed contained brucine, and that to this latter was due the loss of excitability of the motor nerves.

In the author's experiments two preparations of strychnine were employed,—the

acetate, and the alkaloid itself, made into a solution with the aid of hydrochloric acid. The former was obtained from Merck, and the latter preparation bore the name of Powers & Weightman. Neither of these preparations, as I have recently determined, reacts for brucine when examined by the nitric acid and chloride of tin test.

The first question which I sought to determine was whether strychnine could or could not directly paralyze the motor

nerves.

To answer this question, the method previously described, of ligating one posterior extremity, was resorted to. Under the skin of the prepared leg two drops of a solution of the acetate (1 part to 500 of water) was injected. In seven to nine hours the mobility in that limb was destroved and its nerves no longer excitable. Strychnine injected into the anterior portions of the body would produce tetanus in all the limbs except the one ligated. In several instances this motor paralysis disappeared after two days, and the animal again moved the poisoned limb. drops of a similarly prepared brucine solution failed to have the same effect.

Unless we conclude from these tacts that the acetate of strychnine is able to produce paralysis of the motor nerves independent of any contamination with brucine, we will have to come to the absurd conclusion that a given quantity of strychnine can contain by weight more brucine than the original weight of the supposed

strychnine.

Having determined that motor paralysis is possible through the agency of this alkaloid, it was necessary to produce this symptom by the introduction of the poison into the circulation. In a large number of frogs in whom one of the sciatics had been cut, one-half centigramme of the drug was brought under the skin of the back. Some of these animals were examined immediately after the tetanus had ceased. Under these circumstances the cut nerve always responded to electrical irritation. other nerve sometimes responded, and at other times did not. In other frogs the irritation of the nerves was not made for several hours after the tetanus had ceased. In the few experiments made with Ranæ esculentæ both nerves were found to be unexcitable; while in the Ranæ temporariæ this result was arrived at somewhat later, yet before the circulation had ceased.

Several frogs thus prepared were kept in water over mercury to avoid all succussions. These animals remained alive for seventy to one hundred hours, having very rare attacks of tetanus. The fourth day I destroyed the central nervous system and examined the nerves. All the nerves, including the one whose connection with the centres had been severed, had lost their excitability.

Can this paralysis be possibly due to contamination with brucine? The answer to this must be given in the negative sense. As was before mentioned, it requires one part of brucine for every one thousand or fifteen hundred parts by weight of the frog in order to produce direct motor paralysis. For strychnine it requires but one part to nine thousand parts by weight of the frog to produce the same effect. It is therefore impossible that the motor paralysis from strychnine is due to contamination with brucine.

Conclusions. — Brucine treated with acetic acid injected into a Rana temporaria in the proportion of one part of the alkaloid to about fifteen hundred parts by weight of the frog, produces a non-excitability of the motor nerves through a direct action on these structures.

Brucine treated with hydrochloric acid produces the same effect in the Rana temporaria; but in the Rana esculenta it, in much smaller doses, paralyzes the motor nerves without having previously induced tetanus.

Strychnine treated with acetic or hydrochloric acid produces in the Rana temporaria paralysis of the motor nerves in one-sixth the dose necessary for brucine to produce the same effect.

Physiological Laboratory of Geneva, April 5, 1879.

OSTEOTOMY IN GENU VALGUM.—Dr. Schmitz recommends that Ogston's operation should be performed in genu valgum, but not subcutaneously. This is thought to be a beneficial procedure, as the operator can see what he is doing, and hence accurately guide the saw, and renders unnecessary the forcible cracking of the internal condyle. Drainage can also be readily carried out. A case of a young girl is related in which this plan was followed. Antiseptic precautions were taken; and in three weeks the position of the bones was eminently satisfactory, without any bad symptoms having shown themselves.—British Medical Journal, May 17, 1879; from Cbl. f. Chirurgie.

#### NOTES OF HOSPITAL PRACTICE.

JEFFERSON MEDICAL COLLEGE HOSPITAL.

CLINIC OF PROF. S. D. GROSS, M.D., LL.D., D.C.L., PROFESSOR OF SURGERY IN GEFFERSON MED-ICAL COLLEGE, ETC.

(Continued from page 505.)

POINTS IN THE DIAGNOSIS AND TREATMENT OF HIP-JOINT DISEASE—THE ACTUAL CAUTERY.

A S this child walks into the room, you notice how he spreads his lower limbs apart. He raises the right heel from the ground, and keeps the knee slightly bent. He is easily tired, and complains of pain in the knee. I am told that this boy suffers distress at night; he wakes up crying with severe pain, which he refers to the Examining the knee-joint, we find that it is not the seat of abnormal heat or swelling, and appears healthy. then, is the cause of the suffering? This peculiar pain is one of the pathognomonic signs of coxalgia, hip-disease, or white swelling. It is a curious fact that the pain is at first referred to the knee, and attention is not called to the hip-joint until later. This reflected pain in the knee, the disease being in the hip, may be due to direct nervous connection through the trunk of the great sciatic nerve, which sends articular branches both to the knee and to the hip, or it may be purely reflex in its character.

Pain in the knee may also be due to scrofulous disease, from the effect of cold and suppression of the cutaneous perspiration in persons predisposed to such affections; but, after excluding disease of the knee, you may recall the fact that in hipjoint disease we generally find the pain referred to the knee; by overlooking this point young practitioners have been sometimes deceived.

The object of the peculiar walk we have noticed is to prevent pressure upon the affected acetabulum, and to rest the body upon the sound limb. The obliquity of the pelvis is explained in the same way: it is made very evident by placing the patient so that you can compare the position of the anterior superior spines of the ilium. Shortening of the femur does not take place in the early stages of hip-disease, but, on the contrary, there is apparent lengthening of the limb from this tilting of the pelvis. In the later stages the thigh-bone may be shortened by absorp-

tion of its head during the progress of caries or ulceration. The disease usually commences in the articular cartilages, and not in the bone, though it finally involves all of the structures of the joint, including the acetabulum and the intracapsular portion of the thigh-bone.

This affection I regard as essentially a strumous one in its origin, course, and termination. The morbid process may be awakened by a blow or some injury in cases where there is a strumous condition, which, however, must always precede it. It is merely a local manifestation of a diseased state of the system, no matter what has been said to the contrary.

It generally occurs in children of four, five, or six years of age, and I have met with it before the age of eighteen months. It is rarely seen after the age of puberty, and never after middle age; indeed, it is essentially a disease of early life.

From what I have said of its strumous character, it does not follow that there must be primarily an actual tubercular deposit in the articular cartilage or in the cancellated structure of the head of the bone, but it is necessary that there shall be a tubercular or strumous tendency. Not infrequently the deposit occurs in other portions of the body, and during the course of the disease this may become developed, in the lungs more commonly. I have seen a great many cases of this kind, and have published a number of them going to prove that this is the usual end of such patients.

This child's health has been seriously impaired by his suffering and the progress of the disease, which has now advanced to the stage of effusion. The limb is somewhat wasted, and when he is turned over on his belly you notice the flattening of the nates and the characteristic effacement of the gluteo-femoral crease on the affected side.

In order to arrest the course of the local trouble I shall apply the hot iron over the hip-joint, just behind the great trochanter, the issue thus made being kept open for several weeks. The very best of all issues is that made by the actual cautery at a white heat. The impression is not limited merely to the part, but is diffused throughout the system. I am very certain that in the course of twenty-four hours he will have no pain at all, and be comparatively comfortable. I shall in-

struct the persons who will have charge of the case to keep him in bed, and apply extension and counter-extension to the We find that such an appliance prevents the irritable muscles from drawing the head of the bone spasmodically against the acetabulum during sleep, causing violent pain and disturbing his rest. child, being thus suddenly wakened, may jump up in utter confusion, recognizing neither his parents when they speak to him

nor the place where he lies.

The child being under the influence of chloroform, I shall move the limb freely. so as to break up any adhesions that may be forming, and next apply the hot iron at the place selected for the issue. The resulting eschar will be four or five times the size of the iron, and the sore left by its detachment will furnish several drachms of pus daily for a number of weeks, or until we think proper to allow it to heal The best dressing after the actual cautery is a cloth wrung out of cold water, reapplied every two hours. This dressing will be replaced by a flaxseed poultice, which will be changed twice daily during the after-treatment. The issue made by the hot iron does not heal quickly, and can be kept open for six or eight weeks.

Recollect that I send this child home with strict injunctions to keep him at rest in bed, with a nourishing, not a restricted, He shall also have tonics and syrup of the iodide of iron, alternating with codliver oil. The limb shall be extended by an appliance similar to that used for fractured femur, and the child kept quiet for a number of weeks; at the end of that time we will apply an apparatus that will allow him to take exercise in the open air.

#### TREATMENT OF ANAL FISSURE.

This man was operated upon at the last clinic for fissure of the anus. He has had two evacuations of the bowels since then, one yesterday and one this morning, but had no pain, although he always had very great pain before when the bowels were moved. The operation has been a suc-It consisted, you will remember, in forcibly stretching the sphincter muscles and rupturing some of its fibres, subcutaneously or submucously, by the surgeon inserting his thumbs within the anus and separating them with considerable force. This paralyzes for a time the sphincter muscles, and allows the little lineal ulcer or crack, known as anal fissure, to get well, The procedure is a simple one, and effectually relieves the patient, who always suffers atrocious pain when he visits the watercloset, which may continue for a long time afterwards, so that he habitually defers evacuation of the bowels as long as possible, and consequently suffers from constipation, which only increases his trouble.

HARE-LIP AND CLEFT PALATE—TIME FOR OPERATING.

This is a little girl in good health, about six months of age, who has a hare-lip and cleft palate. The former defect is easily remedied, but the latter requires a more formidable operation. The object is to close the fissure by a plastic operation. It is a comparatively tedious and severe procedure, and is sometimes followed by fatal results. Sir William Fergusson mentions three cases in his work on surgery in which death resulted. These patients died from the shock of the operation. It is said that children of this age are extremely liable to convulsions after a surgical operation, though I have never witnessed a case of convulsions in all my life from such a cause in all the operations that I

have performed.

I shall close the gap in the lip this morning in the usual manner, reminding you of the three steps of the operation. First, the upper lip is separated from the gum and alveolar process at the site of the cleft and for some distance on each side. chasm is a wide one, and the lip must be detached quite freely in order to prevent undue traction when the wound is brought together. The second step of the operation is to pare the edges of the cleft in the lip. so that the borders shall be a little concave, and thus prevent a notch in the upper lip after the wound has healed. Finally, the raw edges are brought together with a few points of the interrupted suture; the first pin being inserted at the vermilion border of the lip, so that the border shall be even. the next at the base of the nose, and one between, one or two stitches being also used to bring the edges of the skin together in the interspaces, if required. In winding the waxed ligature around the pins, it is made to form an oval, not a figure of eight, over the pin, and the silk is carried from one pin to the other so as to cross between them. A little chloroform is needed for the operation in older children, but is not essential for young infants.

Small sponges on handles are very useful to keep the mouth free from blood, although if the coronary arteries are controlled by artery-compressors but little bleeding occurs. These are applied to the upper lip at the corners of the mouth: they are merely serres-fines of good size. In separating the lip from the gums, the knife must be kept in as close contact with the bone as possible, or there will be danger of hemorrhage. After the operation the child requires to be well fed with plenty of good milk, or it will be fretful and the success of the operation will be interfered with. Do not forget to cut off the points of the pins, or they may cause trouble.

In regard to the cleft in the vault of the mouth, we find that it extends entirely through the bony as well as the soft palate, from the alveolar processes to the uvula. Nothing will be done at the present time for this deformity. As the child grows older an obturator can be worn, but a surgical operation cannot be attempted until the patient is of the proper age, at about the fourteenth or sixteenth year.

Now, as good old Ambrose Paré used to say after an operation, "I have done all that I can do; God must do the rest." The child is not a strong one, and if I had followed my own inclinations I would have postponed the operation until five or six months later. The upper pin may be removed at the end of the second day, and the lower one in three or four days; if taken out too soon, before union is strong, there is danger that the wound will separate when the child cries.

#### CLINICAL HISTORY AND TREATMENT OF EN-LARGED TONSILS-OPERATION.

Here is a young lady who is only 7 years of age. She is laboring, I am told, under an affection of the tonsils, which are greatly enlarged, as a result of longstanding chronic inflammation. If this patient were brought to me in a dark room and should address me, I would, from the sound of her voice, have no difficulty in pronouncing as to the nature of her trouble. The crevice between the two tonsils, I find upon examining the parts, is much diminished by the swelling of these bodies, and it is still further reduced by an elongated The consequence is that there is uvula. great difficulty in getting sufficient oxygen into the lungs, especially when the child is lying down at night. There is difficulty in breathing, she struggles for breath, and has to lie with the head thrown backwards, so as to bring the mouth nearly in line with the trachea. She is a lusty snorer, and as a result of her exertions sweats at night,—not perspires, but sweats,—and has to prop up her head and shoulders with pillows to get relief from the threatened suffocation. The breast in these cases is flattened in front and arched behind, from the constant over-action of the respiratory muscles in trying to overcome this difficulty.

In addition, there is another trouble, that of indistinct articulation; the voice is muffled and strained. In many cases also the growth of the body is stunted, because not enough oxygen is received for proper

stimulus of the system.

What I propose to do for the patient's relief is to remove a part of each tonsil, —not the entire tonsil, but a considerable portion of it. No anæsthetic is needed for this operation; it is quickly performed, and, moreover, we need the co-operation of our patient. In young children we meet with more difficulty in accomplishing our purpose, and it is well to wrap the little one up in a sheet, so as to confine his limbs and prevent struggling by making a cylinder of his body, and we may even be compelled to give a few whiffs of chloroform. In former years, before the discovery of chloroform, I used to be worried very much from this cause, and often had my fingers bitten.

Enlargement of the tonsils is occasionally met with in very young children, and is sometimes even congenital. Often, if, indeed, not generally, we find that these children are of a strumous habit of body, and badly nourished. Sometimes the application of nitrate of silver in strong solution twice a week for a long time will be sufficient to remove a moderate enlarge-

ment.

There is rarely much bleeding after the operation; oozing may be checked by rinsing the mouth with vinegar and water. The gland is not only swollen, but it is diseased in its structure, and its vessels are enlarged, so that some oozing will occur, which will, however, tend to relieve the congestion. There is occasionally a great amount of bleeding after the operation, and I have had six or seven cases where it was considerable, and even alarming, causing great anxiety at the time; but they were subsequently relieved by styptics and pieces of ice held in contact with the surface,

keeping the mouth open so that the wound was exposed to the action of the air. In performing the operation, the head is thrown back and the mouth widely opened, so as to throw the light freely on the pharynx. The patient being seated on a chair, the prominent part of the tonsil is seized with volsella, and a portion of it removed with a probe-pointed bistoury, cutting from below upwards.

After the operation the patient should be kept free from exposure, and cautioned against taking cold; she must also live on slops for a few days, and avoid solid food; this is about all the precaution required.

I said a few moments ago that this child does not perspire at night, but sweats. Let me caution you against using this word in your practice: a horse *sweats*, a gentleman *perspires*, a lady *glows*. A lady would feel very much offended if you should apply a less polite term in speaking to her.

F. W.

#### TRANSLATIONS.

SECRETORY AND TROPHIC GLAND NERVES. -R. Heidenhain asserts that there are two sorts of fibres contained in the secretory nerves of the parotid,—the so-called trophic fibres, which influence the secretion of the organic matters, and secretory fibres, which influence the secretion of water and salts. The cerebral gland nerves contain chiefly secretory fibres, so that the secretion they cause is relatively poor in organic matter; the sympathetic contains chiefly trophic fibres, so that the secretion following its excitation is richer in organic matter. the parotid of the dog the sympathetic carries only trophic fibres, so that its excitation does not give rise to any visible secretion. - Pfluger's Archiv; from Cbl. f. Chir., 1879, p. 371.

Tannic Acid Baths.—Shafer, in a brochure on this subject, recommends tannin baths in leucorrhea as far superior to the annoying and repugnant custom of tamponing the vagina heretofore employed. By the second or third bath the secretion diminishes, the mucous membrane loses its red color, assumes a firmer consistence, and in some cases of leucorrhea, even of long standing, ten baths have sufficed to make a cure. In amenorrhea, also, Shafer has obtained good results from this procedure. In the case of a young woman sufering from amenorrhea with anæmia, who

was so forlorn she could scarcely drag her self about, three baths sufficed to cause a decided change. Her appetite returned, her color came back, and soon the menses reappeared. Shafer also urges the use of the bath in dysmenorrhæa, metrorrhægia, etc. He has likewise found it useful in prolapsus vaginæ or recti, in the chronic cystitis of old men, in chronic skin affections, atonic ulcers, etc.—Le Mouvement Méd., 1879, p. 255.

OUEBRACHO: A NEW REMEDY IN DYSP-

NŒA.—Penzolt received, some time ago, from Brazil, a package of bark from the Aspidosperma quebracho, a tree belonging to the Apocyneæ, said by South American physicians to possess anti-febrile properties. An alkaloid has been extracted from this by Baeyer, but this has not yet been tried, a tincture of the bark being employed by Penzolt, who found little or no anti-febrile effect from its use. On the other hand, he found it of value in various forms of dyspnœa. The formula used was as follows: ten parts pulverized bark were extracted for a week with one hundred parts alcohol, filtered, evaporated, dis-

solved in water, again evaporated, and

this solution, one or two teaspoonfuls were

given twice or thrice daily. It could be

dissolved in twenty parts of water.

continued indefinitely without fear.

Penzolt concludes as follows: we possess in quebracho bark a remedy which, without any ill effects, diminishes or puts an end, within an hour, to various forms of dyspnœa in the different diseases of the lungs and circulatory apparatus. The effect produced is manifested by a reduction in the frequency of respiration, often in the depth of the cyanosis, and, above all, in the subjective anguish.

The bark, which alone is as yet procurable, is used in commerce for tanning leather.—Berlin. Klin. Wochens., No. 19,

leather.—Berlin. Klin. Wochens., No. 19, 1879.

TREATMENT OF METRORRHAGIA BY CAFE NOIR.—What will not be used next for uterine hemorrhage? Després comes out

Noir.—What will not be used next for uterine hemorrhage? Després comes out with two cases of intractable metrorrhagia in which he prescribed six cups of strong infusion of coffee in a single day, with perfect and immediate success, the hemorrhage ceasing within twenty-four hours. Després thinks the caffein contracted the heart and blood-vessels.— Four. des Sci. Méd. de Louvain, 1879, p. 217; from Moniteur Thérap.

# PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, AUGUST 2, 1879.

#### EDITORIAL.

DIET IN HEALTH AND DISEASE.

CIR HENRY THOMPSON, who is equally clever with the catheter and with the pen, has just published, in The Nineteenth Century, an entertaining dissertation on "Food and Feeding," in which, after enumerating the various articles of vegetable and animal food ordinarily consumed by Englishmen, with a long additional list of those which could with advantage be made use of, he gives a sketch of the dinner-table as it is and as it might be. Sir Henry writes for the intelligent and well-to-do classes, and his scheme for dinner-parties, though fascinating even to the eye, is only intended for such. It is, perhaps, well that the physician who is also a gastronome should give the world his views upon the important subject of food and drink for the upper classes. Enough remains to be done even here towards settling the ideal bill of fare. But the question suggests itself, why should not this be done for the million, and why should not the physician, who now in these latter times is enlarging his field of usefulness by the study of "preventive medicine," add to this the study of food and drink, not merely from the physiological but from the more practical dietetic stand-point?

Nothing could be more satisfactory, in their way, than the efforts which have recently been made in New York by Miss Juliet Corson, and elsewhere by others, to give a cheap, practical dietary to the poorer classes; but this is only in one direction. What is now needed, it seems to us, is a careful study of the proper forms of diet suitable for invalids, dys-

peptics, and convalescents. It is true that some physicians — many, perhaps — have been compelled by necessity to frame such dietaries for their own use in daily practice. But no book, we believe, exists in the English language like the popular German "Dietetic Cook Book" and the "Dietary for Dyspeptics" of Wiel,—convenient and practical hand-books, which can be perused with benefit by the doctor and recommended with confidence to the patient.

The young physician, suddenly called upon to frame a dietary for his patient, is often at a complete loss where to begin, and is too apt to recommend a few articles of food, almost at hap-hazard, and forbid some of the worst indigestibles in the same way.

A ready sale, we venture to say, and a great reputation, await the first satisfactory and convenient work which shall be written upon the subject of diet for the invalid and convalescent.

### LEADING ARTICLES.

THE USE OF THE FORCEPS AND ITS ALTERNATIVES IN LINGER-ING LABOR.

11.\*

THE admirable opening address of Dr. Barnes was not followed up with the ability which might have been expected, some of the addresses being prolix and not very edifying. The opinions of the leading English obstetricians on this subject have much interest, however. Dr. George Kidd, of Dublin, in reference to the "high operation," thought no one would hesitate to apply the forceps when the os is nearly or entirely dilated, and the head lying at the brim and making no progress. The point is, are we to use the forceps when the os is undilated? Dr. Kidd thought not. Even when the os is dilatable, he thought manipulation better. Even, also, when the os was dilated to an inch and a half, to proceed and introduce the forceps to drag the head down through

<sup>\*</sup> See Medical Times, No. 302, p. 458.

it was, he believed, a dangerous practice. He preferred the warm bath, chloral, or chloroform, etc. When, however, there is some minor disproportion or a malposition, Dr. Kidd would use the forceps high up with the os undilated. "But," he concluded, "to let it go forward as our teaching that we may always use, or should always use, the forceps early in the first stage of labor, when there is no urgent demand for it, except the time that has been passed, would, I think, be most unfortunate for society, and for our profession."

Dr. Thorburn, of Manchester, inveighed against the use of ergot with an undilated os, and urged the more frequent employment of chloroform. Prof. Stevenson, of Aberdeen, and Mr. Newman agreed with Dr. Barnes. Dr. Malins, of Birmingham. maintained that in the majority of cases in which the "high operation" is used the alternative of turning is as efficient as easy, and as safe a practice as the use of the forceps. Dr. Alderson and Mr. Worship followed, urging the frequent employment of the forceps. Dr. Edis considered the forceps as an aid to supplement the defective arrangements of nature, and not as a last resort. When evidence of flagging powers showed itself, he would apply outside pressure by the hands or with a binder. He would not use ergot. Dr. Lombe Atthill thought that if any aid was necessary to midwifery, the forceps was superior to any other. With respect to the use of ergot, this was absolutely prohibited in the Rotunda Hospital, under his manage-The real question at issue, he thought, was whether the use of the forceps was justifiable in cases in which the os was not fully dilated. As to this, Dr. Atthill said, "I avoid the use of the forceps before the os is fully dilated in all cases in which I can do so; but, on the other hand. if a case occurs in my practice in which I believe it imperative to deliver the woman before the os is fully dilated, I unhesitatingly have recourse to the use of the forceps, notwithstanding that the os uteri is not fully dilated. I believe that practice is safer than the practice of version."

Dr. McClintock, of Dublin, could not agree with Dr. Atthill in his denunciation of ergot. He (Dr. McClintock) customarily used it in the later stages of labor, and could see no objection to its employment. He considered it a most valuable

remedy, and not likely to do harm. He agreed with Dr. Barnes as to the use of the forceps in the higher operation. Roper, of the Royal Maternity Hospital. appeared as the most strenuous opponent of frequent use of the forceps. When used in lingering labor due to inertia, he used ergot at the same time. ergot stimulates the uterus to increased action, it does not always succeed in expelling the child. When the influence of the ergot is expulsive, the forceps is not needed. When, however, the uterus under the influence of ergot merely seems to contract upon the child, death will ensue unless the forceps are used to aid expulsion. We cannot expel the child by pressure from without on the fundus, as we can the placenta. Yet these manipulations may excite the uterus to contraction. The forceps may also be used in the opposite variety of cases, where in robust primiparæ the powerfully-acting uterus in the end is unable to overcome the rigidity of the soft parts of the outlet. We are warned by the pains becoming less forcible and frequent, and there is less movement with each pain. Here we should anticipate the occurrence of dead-lock, and supplement the powers of nature before the breakdown takes place.

As to the high operation, Dr. Roper had never seen a single case of death, either of child or mother, or of damage to the maternal structures, from a protracted first stage of labor. Of course, it is understood that allusion is made to natural labors, with the exception of a rigid state of the os uteri. A wide distinction must be kept up between a head above the brim which does not come down, because in the one case it is obstructed by the brim itself (a bony obstruction) and in the other by the rigid os and lower segment of the uterus. In nervous women who bear their pains badly, the forceps may be used with propriety. The forceps are used too frequently, and it is possible that much of the gynæcological work of the present day results from this frequent interference with the natural functions in childbirth. Roper himself has only used the forceps eighty times in nine thousand three hun-

dred and eighty-nine cases.

Dr. Braxton Hicks spoke of trismus of

the uterus, where the fœtus is held firmly grasped; and here chloroform may be substituted for the forceps to advantage. This irritable condition of the uterus is sometimes brought on by the too early use of ergot. Occasionally fissures of the cervix occur without the forceps having been used, and occasionally, perhaps, the forceps used high up is blamed for these.

The discussion was then adjourned to a

later meeting.

## PROCEEDINGS OF SOCIETIES.

PHILADELPHIA COUNTY MEDICAL SO-CIETY.

T a conversational meeting held at the hall of the College of Physicians, Philadelphia, April 9, 1879, Dr. Henry H. Smith, President of the Society, in the chair, Dr. O. H. Allis gave a lecture upon "The Pathology and Treatment of Fractures of the Lower Extremity of the Humerus," and presented several cases showing bad results from treatment by the ordinary angular splint, anterior or in-

ternal.
Dr. Packard thought that fractures about the elbow-joint might be divided into three classes: I, those in which there was mere fissure, with no tendency to displacement, in which splints were needless; 2, those close to the joint, in which muscular action produced a tilting forward of the lower fragment, by which, after union, flexion was stopped at a

certain point; 3, those running into the joint, which were likely, under any treatment, to be

followed by permanent stiffening. He referred to a former communication of his to the Society upon this subject, and described a splint made of binders' board, from which he had many times, as he thought, ob-

tained exceptionally good results.

He maintained that, in fractures near the joints, early and frequent passive motion should be the rule. The fracture can be firmly grasped, and very gentle motion impressed upon the joint, which otherwise will stiffen until the force necessary to move it may re-fracture the bone. He thought that in the cases of violent dealing mentioned by Dr. Allis as seen by him there was bad surgery, either at that time or in the previous treatment,-probably both. One other point; he thought it always a bad thing, for the surgeon as well as for the patient, for the latter to be dismissed with the assurance that "it will all come right." The treatment, or at least the oversight, of the case should continue until the final result is attained.

Dr. R. J. Levis had been interested in the lecturer's remarks, which he considered very instructive. Fractures of the elbow are more liable to be followed by annoying deformity than those of any other portion of the body. One point in the pathology of these fractures is suggested by the remarkable similarity in the deformity that results. Taking a supracondyloid, more or less transverse, fracture of the humerus, we will observe that the lower fragment is usually carried backward and upward, the proximate end of the fractured shaft projecting in front, giving the appearance of a dislocation of the forearm backward. In the books this fracture is generally considered to be the result of direct violence upon the elbow, which is mechanically almost impos-In the speaker's opinion it is caused in the same manner as fracture of the lower end of the radius, *i.e.*, by over-extension, or cross-breaking strain. The deformity is due not so much to the muscles inserted near the joint, the biceps, triceps, and brachialis anticus, but to the muscles of the arm and forearm, such as the supinator longus and the extensors, which produce a partial rotation of the lower fragment very difficult to overcome, and very likely to persist after union has taken place. A large number of dry specimens that he had examined had invariably shown this partial rotation on the long axis of the shaft of the

In regard to treatment of fractures in general he had become skeptical as regards splints, and had largely discarded them from his treatment of fractures at the Pennsylvania Hospital. The box used in fractured leg is hardly a splint at all; in fracture of the thigh he uses extension and steadies the limb with sand-bags. In fracture of the humerus he generally binds the arm to the side; when in the upper part of the humerus, no splint that has ever been devised will do anything at all in bringing the parts into their proper relations: the postural treatment is the only method that will do this. In some cases the forearm must be fixed behind the patient; in a case of an old gentleman he could only get the fragments in proper position by putting the arm at right angles to the body, and he had been obliged to keep him in bed with his arm fully extended for a month. In cases such as the lecturer had shown he was convinced that the splints may do great harm.

In reply to a question, he said that in the

treatment of fracture of the thigh he did not look upon sand-bags as splints, and moreover he generally found them either away from or under the patient, so that he would often much rather not use them at all, relying

solely on full extension by weight.

Dr. O. H. Allis said that, as a rule, he would recommend rest for about four weeks before beginning passive motion; but when the fracture extends into the articulation regular movements must be made as soon as any inflammatory symptoms around the part had subsided, in order to preserve the use of the

EPIDEMIC OF PNEUMONIA IN PHILADELPHIA.

Dr. Henry H. Smith called Dr. Burns to the chair, in order to present an account of the

mortality from pneumonia that had recently prevailed in Philadelphia. At the beginning of February he had been struck with the number of deaths from pneumonia, and had called the attention of the Society to the matter, which was subsequently discussed at a special meeting.\* The deaths from pneumonia for the week ending February 8, 1879, were onesixth of the whole mortality; there were fortyfive to fifty deaths per week from acute pneumonia. He had inquired whether there was any peculiarity in the form of the pneumonia. and had invited gentlemen from different portions of the city to participate in the previous discussion, when at least fifty physicians were present. At that meeting not one of those present would admit that he had three cases under treatment; although there must have been four or five times as many cases as those that ended fatally, which would indicate a prevailing epidemic. While the deaths from bronchitis were not increased, and those from phthisis were about as usual, the deaths from pneumonia actually exceeded those from consumption. From the fact that the gentlemen who attended the previous meeting, and who were engaged in active practice, had seen so few cases, he had taken the trouble of visiting the Health Office to see who furnished the certificates. Out of 177 certificates 46 were from members of this Society, only 4 from irregular practitioners, and 3 or 4 from the coroner; all the rest are from regular practitioners, and therefore presumably from those who are able to give a correct diagnosis.

A serious question now comes up: Is there anything wrong in the prevailing method of treatment of this disease? The results are certainly not so successful as formerly; whether due to different manner of living or to difference of treatment is yet to be decided. It is to be feared that our young men have been influenced by the views of German pathologists, whose patients are under entirely different surroundings. Pneumonia was not formerly regarded as a very fatal disease under the old treatment; certainly the results are very different now. Why this is so is a subject well

Dr. R. A. Cleemann said that he had noticed the same high rate of mortality recently oc-

worthy our consideration.

curring in England and Ireland, and did not think it necessary to call into question any other cause than the season of the year and the prevalence of cold winds and moisture,

Dr. George Hamilton said he had no doubt that to the unusual prevalence of cold, damp, and changeable weather was to be referred much of the fatality of the present epidemic of pneumonia. He did not think the mortality was greater, in proportion to population, than had long ago occurred when typhoid pneumonia was epidemic in this city, and probably many cases this season were of that

Dr. M. O'Hara had noticed the prevalence of pneumonia, which had a downward tend-ency from the beginning.

Dr. Laurence Turnbull called attention to the cold weather and great velocity of the winds during the latter part of the winter,

which were unusually marked.

Dr. Robert Burns, of Frankford, had noticed an unusual number of cases in his neighborhood, which he attributed to the great cold and changeableness of the weather. In almost all of the patients he had noticed that the characteristic rusty sputum of pneumonia was absent, and there was no sputa whatever in many cases. There was generally marked consolidation of the lung in his patients, but there was absence of crepitus from the beginning, in almost every case. In many there was also found a great deal of laryngeal and bronchial inflammation, particularly in the minute bronchial structure closing the air-cells. He had been surprised to find so much said about pneumonia, and thought there must be a tendency among a certain class of practitioners to call every trouble of a pulmonary nature pneumonia. He had observed an intermittent character in many of the cases; there was a change every two or three days, with considerable inflammation; there was not a great deal of fever, and it was easily controlled, but there was a great degree of prostration. He had given quinine freely, with good results. The disease was not typhoid pneumonia, but intermittent bronchitis, with obstruction of the air-vesicles, in his experience, and he expressed the opinion that there was not as much pneumonia as had

Error in diagnosis is supposed by some to have led to a return to the Board of Health of a larger number of deaths from pneumonia than really took place; but why such error should occur this season rather than another does not appear. If, in fact, as is generally admitted, pneumonia is at the present time exceptionally modified as to symptoms, we should infer that too few, instead of too many, deaths have been returned under this title. The allusion just made by a member to the views of a prominent lecturer who was disposed to regard the existing epidemic as influenza rather than pneumonia, recalls to mind the extraordinary outbreak of influenza in 1829, when it was thought that some in nearly every other family were affected by it; yet the percentage of deaths was greatly below that of the present epidemic, and was confined in great measure to aged persons, just the reverse of what has occurred this Pneumonic inflammation is epidemic nearly every year in this city, and, like several other affections, is subject to variations in symptoms, yet without losing its specific character; and certainly, if its normal character should, at times, simulate that of influenza, a lesser degree of fatality, not a greater, might rationally be expected.

<sup>\*</sup> Report, Phila. Med. Times, p. 359, current volume.

been imagined. Although he had a few cases of pneumonia with the characteristic symptoms of crepitus and brickdust-like sputum, yet these were few compared with the above-

described cases.

Dr. F. Woodbury said that a possible explanation of the large number of cases of asthenic pneumonia, and especially its prevalence among elderly people, might reside in the fact that the city, at the period named, was passing through an epidemic of influenza, in common with other communities along the Atlantic coast, as had been pointed out by Professor Da Costa in a recent clinical lec-The peculiar characters of the present series of cases of pneumonia would correspond readily with the theory of its being a secondary rather than a primary disease, as it is generally held that pneumonia, occurring as a complication to influenza, differs materially in its course from ordinary croupous pneumonia, and is accompanied by a relatively large mortality among the very young and also among those advanced in life.

#### COLLEGE OF PHYSICIANS OF PHILA-DELPHIA.

May 7, 1879. R. ISAAC RAY read a paper upon the subject of recoveries from mental dis-A wide difference of opinion has always existed respecting the curability of insanity, which, contrary to expectation, the information gained from the establishment of hospitals in recent times has failed to reconcile. Dr. Earle, in examining the matter of recoveries as exhibited in the statistics of hospitals for the insane, has found that thirty or forty years ago the proportion of recoveries was much larger than it has been of late years. Dr. Earle accounts for this by suggesting two sources of error committed by the reporters. One of these depends upon the idiosyncrasy of the individual, temperament, constitutional organization, etc. Self-interest and ambition may have prompted more favorable returns

in some cases than in others.

Again, Dr. Earle says that "the reported recoveries from insanity are increased to an important extent by repeated recoveries from the periodical or recurrent form of the disease in the same person; and consequently the recoveries of persons are much less numerous than the recoveries of patients or cases; and, consequently, from the number of reported recoveries of cases, or patients, it is generally impossible to ascertain the number of persons

who recovered."

These views are not borne out by the facts, properly interpreted. The temperament of physicians, taken together, is just about the same now as it was fifty years ago. There is

\* Phila. Med. and Surg. Reporter, March 8, 1879, vol. xl.

the same proportion of sanguine men who take too hopeful views of their patients' condition, and cautious men who tend to give unfavorable prognoses. Then, too, the practice of reporting cases of recovery instead of persons permanently cured was no more common than now.

As, then, neither the temperament of the physician nor the repeated counting of periodical cases accounts for the larger proportion of recoveries in the earlier times, we must look for the explanation in another direction, and we shall find it in various agencies that have come into operation in later times.

These are the ingathering of a larger proportion of non-violent, chronic, less curable cases, dependent upon the wider popularity of hospitals for the insane, the actual increase of insanity in our midst, owing to the high pressure of modern life, and, as a result of this, the appearance of new forms of mental disease heretofore unknown.

These, then, are the points which are believed to have been fairly made,—viz.:

I. Those qualities of temperament which lead men to unduly magnify their achievements are as common at one time as at another.

II. The practice of reporting cases instead of persons has not been confined to any particular period, and therefore, while it may vitiate our estimate of the curability of insanity, it cannot make the proportion of recoveries larger or smaller at one period than at another.

III. Cases marked by high excitement entered our hospitals in a larger proportion to those of an opposite character fifty years ago than they do now.

IV. Under the influences of highly civilized life the conservative powers of the constitution have somewhat depreciated, and to that extent impaired the curability of insanity.

V. During the last fifty years, cerebral affections in which insanity is only an incident have been steadily increasing, and thus diminishing the proportion of recoveries.

June 4, 1879.

Dr. ROBERT P. HARRIS reported, on behalf of Dr. John L. Atlee, of Lancaster, Pa., a remarkable case of congenital ventral gestation, the subject being a girl 6 years old, who recovered after the discharge of the fœtal mass from her abdomen, and lived seventeen years. A record of the case in question, with the exception of its early history, is contained in the work of the late Washington L. Atlee on "Ovarian Tumors."

"Ovarian Tumors."

The subject of the anomaly in question was Ann, daughter of Mr. Solomon Oswald, of York, Pennsylvania, aged 6 years, who presented in very early childhood an appearance of irregular conformation and enlargement of the abdomen. She was of delicate build, with fair complexion, light hair and

<sup>\*</sup> Phila. Med. and Surg. Reporter, March 8, 1879, vol. xl. p. 208.

eyes, and belonged to a consumptive family. In the progress of her disease, an abscess formed in the lower portion of the epigastric and upper part of the umbilical regions, which opened, and a mass presented itself, which in time protruded through the abdominal wall. The physicians of York, fearing to explore this, applied ligatures on several successive occasions to the protruding portion, with the effect of removal by strangulation, under which process a very offensive effluvium was given out. Soon after these removals the whole remaining mass escaped, and this was preserved in a bottle of alcohol. It was then discovered that the enclosing sac still contained a mass of hairs, and, as the patient was by this time in a very low state, she was carried upon a pillow to Dr. Atlee's, in Lancaster, for his professional advice, and the specimen in the bottle submitted to him for opinion. This was in the summer of 1844.

Dr. Atlee found a weak, delicate, emaciated girl, with an abdominal fistula, and hair protruding from it. He removed the hair, and, having washed and dried it, found that it weighed two drachms. It was soft, light-colored, and of varying lengths, the longest portions measuring from ten to twelve inches. After the cyst was empty of its contents the girl's health began to improve, but it was soon discovered that the sac in some way communicated with the stomach, as evinced by the escape of articles of food through the fistula. Dr. Atlee writes, "Notwithstanding the care which was taken to allow nothing to be eaten but soft and easily digestible food, she had been so much indulged previously that she insisted on having berries and green corn; and I well recollect, on one occasion, seeing a large quantity of whortleberries, and, on another, of grains of Indian corn, which passed in that way.'

When her general health had sufficiently improved, the child was taken home, and attended to by her father, who was a very intelligent druggist. The cyst gradually contracted to a fistula, which continued open until she was 14 or 15, when it closed up, leaving a button-like projection about the size of a quarter-dollar, which always remained. The girl developed into a fine and handsome young lady, menstruated at the age of 12, and continued to be regular until she fell a victim to phthisis pulmonalis at the age of 23.

The mass contained in the bottle was sent to Philadelphia, to be dissected and prepared by the late Prof. William R. Grant, by whom it is described in "Atlee on Ovarian Tumors," page 199.

Within the mass there was traced, with some difficulty, a tolerably perfect, though considerably distorted, skeleton, as shown in the cut

It is very evident, from the description of Professor Grant, who was a skilful anatomist, that the body under inspection was not a dermoid tumor, but a product of generation,—a twin, we may say, of the girl, within whose abdomen the germinal trace was partially and irregularly developed. The monster by inclusion is certainly one of the most difficult of all the duplex types to comprehend and explain on the principles of teratological science. One germinal or twin trace would



Skeleton as dissected from the mass,

appear, for some unaccountable reason. to maintain a dormant vitality, like that of an unsprouted seed or severed bud, while the other develops and sur-rounds it. In the changes of growth and nutrition that occur in the body after birth the dormant germ appears to be better nourished, is stimulated to grow, and may finally assume the characteristics of a hard tumor, an abscess, or a cystic growth, especially if located in the abdomen, breaking down the health of the subject, and, in almost all such instances, ending fatally. In the case before us there is no mention

of any ascitic or encysted fluid having been detected, and I presume there was no such complication to endanger the life. The probability is that the fœtal growth was much more superficially located than is usual in such cases, and hence the discharge of it during life, and the favorable termination of the case.

After a careful and extensive search for parallel reports, Dr. Harris said he had found no authentic record in which a congenitally-enclosed fœtus was removed from the abdomen, during the life of the child, with recovery. He added a condensed record of some of the most remarkable cases of fœtus by inclusion that have been published during the last seventy-five years.

A NEW SUBSTITUTE FOR CHLOROFORM,—
"Ethidene" is said to possess the valuable
anæsthetic properties of chloroform, without
lowering the blood-pressure to anything like
the same degree. Ethidene has been administered to twenty persons, of various ages,
during surgical operations (sometimes prolonged), with satisfactory results.—British
Medical Journal.

## REVIEWS AND BOOK NOTICES

DISEASES OF THE THROAT AND NASAL PAS-SAGES: A GUIDE TO THE DIAGNOSIS AND TREATMENT OF AFFECTIONS OF THE PHAR-YNX, ŒSOPHAGUS, TRACHEA, LARYNX, AND NARES. By J. SOLIS COHEN, M.D., of Philadelphia. Second Edition, revised and amended, with 208 Illustrations; pp. 742. New York, William Wood & Co., 1879.

The second edition of Dr. Cohen's classical work fully merits the words on the title-page, -revised and amended. "To the reader familiar with the first edition, considerable change will be apparent in the present one. Some material has been suppressed, some modified or augmented, and some added."

The first chapter is devoted to diseases of the throat in general; the second to the examinations of the throat and nasal passages; the third and fourth to sore throat, both common and specific; while the fifth, consisting of over sixty pages, is really a brochure on diphtheria. This chapter is not only of absorbing interest, but full of information which will render every practitioner of medicine good service in his hour of need. In alluding to the apparent identity of croup and diphtheria, the author gives a table showing the differences between the two diseases, but he admits that the majority of medical men of the present day believe that these two diseases are identical. The treatment of diphtheria is copiously set forth in twenty pages, the author's own manner of treatment being very concisely stated in four or five pages.

In Chapter VI. the various forms of chronic sore throat are described, and their treatment given. Chapters VII. to IX. are devoted to special affections of the soft palate, the uvula, the tonsils, pharynx, and œsophagus; and Chapters XI. to XIV., inclusive, to affections of the nasal passages, the septum narium, frontal sinus, the larynx, and the trachea. Chapter XV., in over twenty pages, treats of artificial openings into the larynx and trachea, exsection of the larynx, etc. The author gives preference to the silver tracheotomy tube, and for facilitating its introduction has invented a "rigid conductor," of which a figure is given on page 673 of the work under review. When the tracheotomized individual is obliged to wear a tube, in order to aid his power of speaking, the author recommends, as the best for this purpose, Luer's pea-valved tracheot-omy tube. He also describes an artificial vocal apparatus, of Gussenbauer, devised to remedy the loss of voice following extirpa-tion of the larynx. Chapter XVI. is devoted to affections of the laryngo-pharyngeal and glosso-epiglottic sinuses, and the concluding chapter (the seventeenth) to external affections of the neck. There is also connected with this book that which is usually not men-

tioned by a reviewer. — an excellent index. which is always one of the most valuable

parts of any good book.

In conclusion, we have but to say that we regret that space limits what could be said in praise of a treatise the size and worth of this. The entire work is characterized by thoroughness, fairness, and extent of research, which recommends it, above all works on this subject, to the profession at home and abroad.

C. H. B.

EMMETT'S PRINCIPLES AND PRACTICE OF GYNÆCOLOGY. With One Hundred and Thirty Illustrations. By THOMAS ADDIS EMMETT, M.D., Surgeon to the Woman's Hospital of the State of New York, etc. Philadelphia, Henry C. Lea, pp. 855.

This volume, fresh from its distinguished author, is before us. To those at all familiar with his original and graphic articles as they have from time to time appeared in our journals, the mere mention that he has written a systematic work on gynæcology will be sufficient to awaken in them a greed which, we can safely assert, will not be forced to go a hun-

gering after the perusal of the volume.

Books, even by specialists, too often deal extensively in generalizations, giving but little satisfaction to him who consults them for special or detailed information. Not so with the present volume, however. Quoting from the text, p. 117, "The object in view throughout the work will be to impress the reader with the fact that success in the treatment of the diseases of women lies wholly in attention to minute details." This is the key-note which reverberates from every chapter; and, just as attention to detail is repeatedly enjoined in the general management and operative pro-cedures, so the author, filled with its necessity, fails not to carry his precepts for practice into his writing, by entering into detail extensively, yet without prolixity.

As a treatise on gynæcology, the work is simply what its author claims for it, viz., a "Clinical Digest," representing "Emmett's Principles and Practice of Gynæcology." The precepts and practices of others, save where they accord with the author, receive little or no attention. This, however, instead of being a weakness, as might at first appear, is, we believe, a positive strength, inasmuch as such material is obtainable elsewhere, and also as it enables the reader, with greater ease and less confusion, to obtain the author's per-

sonal views.

To specialize the chapters of particular interest would be to give the "Table of Contents" entire. That on "Principles of General Treatment" is especially unique and rich in its suggestiveness, and sufficiently minute in detail to awaken many intelligent responses in the shape of improvements in the general practice of the day. The chapter is full of wrinkles that no one can afford to be without. The chapters descriptive of operations are admirable in their completeness of detail, and are eminently worthy of extensive discipleship, both from writers and practitioners. We are very much mistaken if this very matter of careful detail in describing operations will not insure for this author more disciples than almost any writer on any branch of medicine

has ever enjoyed.

There is but one feature in the book which we would like to have omitted. It is more than unpleasant to have an author who is filling you with enthusiasm over his originality in methods of thought and action, stoop so often to claim that "I was the first to advocate this," or "I was the first to introduce that to the profession," in speaking of a special form of needle, or some even much more trivial matter. Yet it is not his claim to priority to which we object, but his manner of putting it. It is a small matter, of course, but in such a book a small matter of this sort becomes the more conspicuous.

No general practitioner or student of gynæcology can afford to be without this volume, for the exceptionally large experience of the author, whose rich and ripe results are embodied in every chapter, and the concise and yet comprehensive manner in which each subject is handled, giving the details of treatment throughout, leave no doubt in the reader's mind what is the author's belief or of the manner in which he puts his belief into

practice.

THE NATURE OF REPARATORY INFLAMMATION IN ARTERIES AFTER LIGATURE, ACUPRESSURE, AND TORSION. By EDWARD O. SHAKESPEARE, A.M., M.D. Washington, Smithsonian Institution, March, 1879. Octavo, pamphlet, pp. 70.

J. B. W.

This brochure, which is the seventh of the series of "Toner Lectures," is based upon original researches by the author, and is illustrated by a series of admirable drawings by the same hand, which have been reproduced by a photographic process. Beginning with a historical sketch, followed by a summary of prevalent opinions as to the organization of blood-clots and the nature of the healing process in arteries after ligation, Dr. Shakespeare goes on to detail the experiments which he has made in the production of clots in vessels by the methods specified, and the results of subsequent careful microscopic examination of these clots. He finishes with a summary of the conclusions to which his investigations have led him, which are stated in a clear and succinct manner, and cannot fail to influence the opinions in future to be held upon this subject. Some of these investigations were included in a former essay of Dr. Shakespeare, which gained the Warren prize a year or two ago, and the work is one which is alike creditable to the author, and one more evidence of the good scientific work which is being done by the younger members of the staff of the University of Pennsylvania.

CLINICAL LECTURES ON DISEASES PECULIAR TO WOMEN. By LOMBE ATTHILL, M.D., etc. Fifth Edition, revised and enlarged, with Illustrations. Philadelphia, Lindsay & Blakiston, 1879. 12mo, pp. 342.

A work which has reached the fifth edition has evidently found favor with the public, and needs no commendation. The author says that the whole work has been carefully revised, a portion rewritten, and some omissions which existed in the former editions have been rectified. We note, as a particularly valuable feature of the book, the full directions for making examinations and the application of remedies. Dr. Atthill is an advocate of the use of arsenic in menorrhagia. Given in the dose of three to ten drops (of Fowler's solution), alone or combined with ten-drop doses of tincture of digitalis, three times a day, between the periods, it often acts very happily. Strychnia is another favorite remedy with Dr. Atthill. Added to ergot in cases of parturition, he says it greatly increases the efficacy of the latter drug, being especially useful when post-mortem hemorrhage is dreaded. It is also useful in combination with iron, in many cases of amenorrhœa, in the dose of one-twenty-fourth of a grain gradually increased.

NAVAL HYGIENE — Human Health and the Means of Preventing Disease, with Illustrative Incidents, principally derived from Naval Experience. By JOSEPH WILSON, M.D., Medical Director U. S. Navy. Second Edition, with Colored Lithographs, etc. Philadelphia, Lindsay & Blakiston, 1879. Octavo, pp. 274.

Intended chiefly for the masters of ships and other non-medical persons connected with the care of sailors, this book contains much of interest and profit for the medical reader. The various measures employed for the preservation of health and the treatment of disease on ship-board are treated in an agreeable fashion, and the book is one which it is pleasant to read, even for one not particularly interested in naval hygiene. While not pretending to the rank of a scientific treatise, it is written from a scientific stand-point, and is up to the times in all respects. The fact of its having attained a second edition shows it to have been appreciated by those for whom it is intended.

MEDICAL CHEMISTRY, including the Outlines of Organic and Physiological Chemistry. Based in part upon "Riche's Manuel de Chimie." By C. GILBERT WHEELER. Philadelphia, Lindsay & Blakiston; Chicago, S. G. Wheeler, 1879. 12mo, pp. 424.

Manuals of medical chemistry have vastly multiplied of late, and, in order to gain attention, any new claimant for popular approbation must present something unusually original in matter or arrangement. This requirement is scarcely filled by Prof. Wheeler's book, which, although of fair size, is so loosely printed that it does not contain as much matter as many smaller treatises. The omissions, too, are such as seriously impair the value of the work to the medical student. Thus, he is supposed already to be acquainted with inorganic chemistry and familiar with the principles of modern chemical philosophy. But if this is the case he probably knows most or all of what Prof. Wheeler desires to teach, or possesses already some other book covering the whole ground.

DIPHTHERIA; ITS NATURE AND TREATMENT, VARIETIES AND LOCAL EXPRESSIONS. By MORELL MACKENZIE, M.D. Lond. Philadelphia, Lindsay & Blakiston, 1879. Octavo, pp. 101.

In this little book Dr. Mackenzie, the well-known specialist, gives a concise and interesting account of diphtheria, its etiology, diagnosis, and treatment. Dr. Mackenzie's large experience enables him to speak with authority, and no one who expects to meet such cases in his practice can afford to overlook what he says.

PRACTICAL SURGERY. By J. EWING MEARS, M.D. Philadelphia, Lindsay & Blakiston, 1878. Octavo, pp. viii., 279.

This book is not made; it has grown. It is the result of years of teaching the classes in operative surgery in the Jefferson Medical College, and is just such a hand-book as every student will need. It treats of surgical dressing, bandaging, ligations, and amputations, or those branches of operative surgery which the student can make himself master of on the manikin and the cadaver. It is very fully illustrated, having nearly as many cuts as it has pages, and they are well chosen.

So far as we know, it is the only one of the books on this subject which gives the antiseptic system in detail. The author has also not omitted the plaster-of-Paris bandage, Sayre's suspension apparatus, and other novelties and improvements. So rapid is the march of improvement, however, that even since this book has been issued Sayre's jacket, it seems likely, is to be displaced by the porous felt jackets, which accomplish the same objects with many additional advantages.

In the matter of the operations on the cadaver, we are glad to see the attention of students called to the differences between operations on the cadaver and on the living body. These are very often overlooked by teachers, who, familiar with these facts by every-day experience, forget that to students they are utterly unknown.

The rules for the operations are, in general,

clearly and correctly given, and are always based on the previously-stated surgical anatomy of the parts involved. W. W. K.

#### GLEANINGS FROM EXCHANGES.

ELASTIC ADHESIVE DRESSINGS.—In order to close wounds of the soft parts, more especially superficial wounds, where the presence of sutures would increase inflammation, Dr. Vogel uses strong moleskin adhesive plaster. Along the edges of the two pieces, which are cut as long as the wound, are arranged a series of little buttons, half an inch removed from each other. The plaster, extending far enough to catch a firm hold on the integument, is applied warm, the contiguous edges being about one-half or three-fourths of an inch removed from the edge of the wound. An elastic cord is then "zigzagged" across like a corset-string, making the needed judicious traction.

The buttons have a rounded head like a small shot, a short neck, which sets into a flattened, rounded plate, about one-fourth of an inch in diameter. The holes are punched through the plaster about half an inch from the edge, which is to be parallel with the wound. The small end of the button is pushed through this hole, and the plaster is then turned under between the skin and the broad base of the button, which is firmly held between the two adhering surfaces of the plaster. Hooks may be sewed on, and would answer the same purpose.—Hospital Gazette, May 17; from Centralblatt für Chirurgie.

INCONTINENCE AND RETENTION OF URINE IN CHILDREN.—Mr. Teevan, in a paper read before the Harveian Society, says that the great point is to make out the diagnosis, for unless this is done all treatment is simply empirical. A physical examination should be made in all cases. Mr. Teevan says,—

The surgical causes that may give rise to incontinence are-1, rectal complaints, such as piles, fistula, excoriations; 2, ascarides; 3, a tight foreskin; 4, congenital insufficiency of the external urethral orifice; 5, a calculus impacted in the urethra. The above lus impacted in the urethra. The above are fertile causes of the complaint, and all remediable. All of them set up and keep up irritation, and produce incontinence by reflex action. Probably of all the above causes the fourth and fifth are but little suspected of giving rise to trouble. A tight foreskin is a common cause of complaint, and I always advocate its removal, as it is usually followed by the best results. It is well known that the meatus externus is the narrowest part of the urethra, but the relation of its size to the rest of the canal is perhaps not so much attended to as it ought to be. There is a general belief to the effect that so long as there is a hole it suffices for micturition. This, how-

ever, is erroneous. If the relation of the calibre of the external orifice to the general urethra be disproportionate, the result is that the urine cannot escape as fast as it ought to do, and irritation is set up in the peripheral extremity of the nerve, which disturbs the vesical centres. For instance, if a boy of twelve or fourteen years of age have a meatus that will only admit a No. 3 catheter, and be suffering from incontinence, we ought at once to suspect that the local obstruction is the cause. Now as regards the last cause of incontinence,—a stone impacted in the urethra. If I could not discover anything wrong with the rectum or urethral orifice, I would pass a very slender sound, having a beak only half an inch long, to ascertain if there were any stone impacted in the urethra. It is not generally known that a stone in the urethra may give rise to incontinence or retention, according to where it may be situated. If the calculus has only just entered the meatus internus, it will be firmly and accurately embraced by the sphincter, so that no urine can escape along the sinuosities in the stone. If, however, the stone advance half an inch further, incontinence will be the result, for the calculus will then act as a gag, and prevent the sphincter from closing, and the urine will dribble away along the sinuosities of the stone. For a knowledge of this fact I am indebted to Civiale's works, and in several cases of incontinence it has enabled me to detect a stone impacted in the urethra. It might be at first sight imagined that if a calculus be impacted in a boy's urethra it would give rise to great pain and discomfort, but this is not so. As the urine dribbles away, the stone may cause but little annoyance; indeed, I have known patients who have had calculi impacted in their urethræ for years without being aware of it, so little discomfort was there caused. Therefore it would be well not to be misled by the quiescence of the parts. In cases of incontinence where a surgical cause cannot be elucidated, I have found belladonna most useful where the complaint was only noc-turnal, as also Sir D. Corrigan's plan of seal-ing the meatus externus with collodion at bedtime. Strychnia is indicated where the incontinence is diurnal as well as nocturnal. Blistering and an exclusively milk diet must not be lost sight of. If all means fail, the application of a mild solution of nitrate of silver to the neck of the bladder is justifiable.

Retention of urine in children is usually due to one of three causes: I, congenital contraction of the meatus externus; 2, phimosis; 3, stone. The first two causes can be at once determined by ocular inspection. As regards calculus, Mr. Teevan says, It may appear to some that it is easier to discover a calculus in a child when its bladder was full rather than empty; this, however, is not so. If a stone cause retention, it must be a very small one, and will, therefore, be found lying at the neck

of the bladder, and will be struck as the sound enters that organ. If the bladder be examined when distended, the surgeon will have to grope about after the calculus, and perhaps not find it. If, on the other hand, he sound the patient when his bladder is empty, the stone will be brought to him. Extreme care should be used in sounding children for stone, as peritonitis readily supervenes on too rough handling.—Lancet, May 24, 1879.

INCONTINENCE OF URINE.—In the *British Medical Journal* Dr. J. C. Flood recommends tincture of cantharides in minim doses, with tincture of the chloride of iron, given thrice daily and in gradually increasing doses. Mr. Holderness suggests the following:

R Acidi benzoici, Dii; Syrupi aurantii, 3ii; Aquæ, ad f\( \frac{7}{3}\) vj.

A sixth part three times a day.

The third dose should be given in bed, the bladder having been previously emptied.

Another correspondent suggests the follow-

ing combination:

R Potassii bromid., 3j; Extract. belladonnæ, gr. iv ad vj;

Infus. digitalis, ad f\( \frac{3}{3} viij.\)
For an adult, half an ounce twice a day.

For a child, a drachm, three times. POSTURE AS A MEANS OF RELIEF IN STRAN-GULATED AND INCARCERATED HERNIA.-At the end of a very interesting paper read be-fore the New York Academy of Medicine recently, by Dr. Frank H. Hamilton, the following conclusions are stated: First, as to our ability to increase the diameter of the hernial apertures, except by resort to herni-otomy. Hernial apertures can seldom be relaxed or opened by any measure except by a surgical operation. The apertures do not, only with rare exceptions, actively compress the protruding viscera, but the viscera become constricted by pressure against the apertures. Relaxation of these apertures is not, therefore, ordinarily a part of the mechanism of the release of a strangulation and of the return of the viscera. Second, as to the effects of taxis and inward traction. Taxis, or pressure from without in, judiciously applied, is first in point of importance as a means of reducing strangulated hernia. Inward traction, judiciously employed, is only second in importance to taxis. It is effected indirectly by paralysis of the abdominal muscles, through the agency of posture or of general muscular relaxants, and by emptying the bladder and lower gut. It is effected directly by peristalsis, anti-peristalsis, and gravitation through the agency of posture. The following means of reducing hernia, alluded to by Dr. Hamilton, may be briefly mentioned: I. Emptying the bladder and rectum and distracting the attention of the patient. 2. Chloroform, bleeding to syncore with her beat the syncore and the patient. cope, or the hot bath to syncope. 3. Ice as a local application can only relieve the button-

holing when it is due to congestion of the ves-

sels, and then only when the circulation is not completely arrested. 4. Opium, which acts indirectly in paralyzing the abdominal muscles. 5. Emetics act probably by upward traction. 6. Purgatives, like emetics, do harm when not successful; they act probably by producing anti-peristalsis. 7. Tobacco and other enemata cause general muscular paralysis. 8. Postures in which the viscera are dragged towards the upper portion of the abdominal cavity are directly useful.—Hospital Gazette, 1879, p. 220.

PALUDAL TORTICOLLIS.—M. Jules Simon records a case occurring in a child four years old, who suffered every day about the same time from spasmodic contractions of the sterno-mastoid, lasting four or five hours. It had previously suffered from several attacks of intermittent fever. It recovered under quinine treatment.—Canadian Jour. Med. Sci.

TREATMENT OF PROLAPSE OF RECTUM.—Dr. Jas. O. Whitney says, in a letter to the Boston Med. and Surg. Jour., "I notice, in Journal for April 10, apparatus for prolapse of rectum, etc. I have recommended for twenty-five years the mother to place the finger in front of rectum (anus), press up and pull forward the flesh during defecation. This prevents descent of the bowel."

NEW FORM OF LIGATURE IN ANEURISM.-Mr. Barwell, in giving an account of a successful deligation for aneurism of the carotid and subclavian arteries, said that the ligature used had been the subject of much care and experiment. Catgut has been shown to be unreliable for tying vessels in continuity; it does not appear that this depends on the method or period of soaking in carbolized The author attributes its defects to the method of manufacturing the catgut itself. Putrefaction in water enters largely into this process; different parts will have suffered in various degrees from putrefaction. But more objectionable even than this is the shape of the ligature, for it is difficult, perhaps impossible, to avoid dividing the inner coats of vessels tied with a round cord. Now, it is this division of vascular coats that exposes patients to the dangers of secondary hemorrhage, which has been the cause of death in almost every case hitherto recorded of tying the innominate or first part of the subclavian. An organizable ligature, which, being flat, does not divide the arterial coats, ought to secure surgery against this danger. After many experiments, Mr. Barwell had hit on the idea of using the middle coat of oxen's aorta, which, being quite fresh, is to be pre-pared by separating it from the outer coat and by cutting it spirally, thus making long, flat, tape-like ligatures, which are dried under suspension by a weight, to remove superabundant elasticity. Just before use they are moistened to restore entire flexibility. Before attempting operative surgery with this material it had been tested experimentally in various ways, and in the case recorded its action had left nothing to be desired.—Lancet, vol. i.,

LAXATIVE BREAD.—Mr. W. H. Taylor says, in the Lancet, that he has lately had bread prepared as follows, and found it most useful in ordinary constipation and as a laxative in piles: coarse Scotch oatmeal, whole wheaten flour, coarse ordinary flour, of each equal parts. The bread can be lightened by yeast, or, to a two-pound loaf, one tablespoonful of baking-powder, made of four ounces of bicarbonate of soda, three ounces of tartaric acid, one pound of ordinary flour, rubbed well together and kept dry in a tin or well-corked bottle. The bread keeps well, and a two-pound loaf will be sufficient for a week, taking a portion once or twice a day in conjunction with ordinary bread.

with ordinary bread.
POISONING BY IODOFORM.—Not much is at present known of the toxic effects of jodoform. and considerable interest therefore attaches to two cases which have been published by Oberlander. The maximum dose given was .8 gramme (twelve grains) daily in a pill. The symptoms of poisoning occurred in one case (a woman twenty-six years of age) after fortytwo grammes of iodoform had been taken in eighty days; in the other case (a woman sixtynine years of age) after five grammes had been taken in the course of seven days. symptoms produced were giddiness, vomiting, and deep sleep, from which the patient could be roused with difficulty. This somnolence was interrupted by periods of excitement, each lasting several hours, and was followed by delirium, headache, sense of impending death. spasmodic contractions of the facial muscles, and, in the case of the younger patient, diplopia. The functions of the other sensory organs were not disturbed, and the pupils presented a normal reaction. Deep inspirations alternated with apnœa of about half a minute's duration. After five or six days the toxic symptoms gradually lessened and passed away .- Lancet.

LARYNGEAL PHTHISIS.—F. H. Bosworth, M.D., at the close of an article on this subject, gives the following conclusions: I. Laryngeal phthisis may develop from a simple catarrhal inflammation, if there exists an impaired state of health from any cause. 2. The progressive stages are catarrhal infiltration, catarrhal ulceration, and follicular inflammation, and tubercle plays no part in its primary causation and development. 3. The disease is far more amenable to treatment than is generally taught, especially if treated in the earlier stage. 4. Tracheotomy is justifiable as a remedial measure, when local remedies fail to relieve, and before it is demanded by dyspnæa from inflammatory stenosis.—

New York Medical Record, May 27, 1879.

TREATMENT OF DIARRHEA BY THE HOT-WATER DOUCHE.—Schorstein advises, in the Wiener Med. Presse, No. 49, 1878, the application of a douche of hot water under strong pressure to the umbilical region, in cases of

diarrhoea. The temperature is at first 50°, but may be raised to 72°. The duration of the application lasts from three to five minutes; after it the patient takes a hip-bath of 50° to 62°. This treatment is generally repeated not more than twice daily. Dysenteric diarrhœas combined with tenesmus, and dysentery itself, if not inveterate, are treated in the same way. The effect is very rapid, and lasts much longer than opium treatment does; the pain is also calmed very quickly. The author has also found this hot douche answer in cases of colic caused by biliary calculus, and in many kinds of neuralgia, sciatica excepted, where it was desirable to remove renal calculi and gravel, or long-accumulated fecal matter.-London Med. Record, April 15, 1879.

#### MISCELLANY.

OBITUARY.-We regret to record the premature decease of two young but rising physicians of this city. Dr. Benjamin B. Yocum, who died on July 21, of typhoid fever, after a brief illness, was well known and highly esteemed, particularly in the University Hospital, where he had charge of the medical outpatients' department. Dr. Francis G. Smyth. who died on July 24, at the age of 35, was already well known as a successful practitioner in the lower part of the city.

THE ORDER OF ST. KATHERINE. — The Queen of England has recently established an order somewhat analogous to the male orders of knighthood, which have long been the reward of merit in various fields. It is to be bestowed upon women who have distinguished themselves as nurses, and has received the name of St. Katherine, we believe, because the money which is to support it is derived from an old charitable foundation or "hospital" of that name long since disused, and the funds of which have accumulated for

many years.

CONSANGUINEOUS MARRIAGES. - Dr. Lathrop, in the Boston Medical and Surgical Journal, June 12, 1879, has obtained the statistics of twenty-five consanguineous marriages in Massachusetts. These resulted in the birth of 107 children. Of these children 92 were sane, 4 insane, and 11 idiotic. Of the 15 whose minds were unsound, 9 became so from known causes other than the consanguinity of parents. Only 6, therefore, of the 107 children could have been made insane by the near relationship of their parents, and even in these cases there may have been other causes.

Amenities of Medical Journalism.—The following choice morceau is from one of our Southwestern journals. Speaking of another journal, from which certain extracts had been made, the editor remarks, "As an apology for inflicting on our readers any extracts from so filthy a source, we can but say that the wisest

of our profession have, on frequent occasions, obtained valuable intelligence, as regards a patient's condition, from a careful inspection of that indispensable article of bedroom furniture so often used, but never seen or mentioned in the vicinity of polite circles; so we, with olfactories cautiously guarded, will, from time to time, carefully scrutinize our poor, pitiable contemporary's filthy discharges, and, if we are ever again so fortunate as to find therein anything that may be of interest, we will republish it for the benefit of more intelligent readers than they can claim.

A SUMMER MADRIGAL (air "Pinafore").-

And so do the fidgets and the colic and the cramps.

#### OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY FROM JULY 13 TO JULY 26, 1879.

Moore, John, Major and Surgeon.—Granted leave of absence for one year, with permission to go beyond sea. S. O. 171, A. G. O., July 24, 1879.

SMITH, Jos. R., MAJOR AND SURGEON.—Having reported in person at these Headquarters, assigned to duty as Medical Director of the Department, to date from 25th instant. G. O. 8, Department of Texas, June 28, 1879.

WHITE, C. B., MAJOR AND SURGEON. — Granted leave of absence for six months on Surgeon's certificate of dis-ability. S. O. 171, c. s., A. G. O.

MOFFATT, P., CAPTAIN AND ASSISTANT-SURGEON.—Having reported in person at these Headquarters, assigned to duty at Camp Winfield Scott, Kirtitas Valley, W. T. S. O. 81, Department of the Columbia, July 3, 1879.

Corson, J. K, Captain and Assistant-Surgeon.— Granted leave of absence for one month, with permission to apply for one month's extension. S. O. 75, Depart-ment of Arizona, June 27, 1879.

Semig, B. G., First-Lieutenant and Assistant-Surgeon.

—Having reported in person at these Headquarters, assigned to duty at Fort Fred. Steele, Wyo. T. S. O. 61, Department of the Platte, July 15, 1879.

Kane, J. J., First-Lieutenant and Assistant-Surgeon.

—Relieved from duty at Jefferson Barracks, Mo., and to report to Commanding General, Department of the Missouri, for assignment to duty. S. O. 164, A. G. O., July

Brewster, W. B., First-Lieutenant and Assistant-Sur-GEON.—To report in person to Commanding General, Department of the Platte, for assignment to duty. S. O. 164, c. s., A. G. O.

Banister, J. M., First-Lieutenant and Assistant-Sur-GEON.—Relieved from duty at Columbia Barracks, Ohio, and to report in person to Commanding General, Depart-ment of the Missouri, for assignment to duty. S. O. 164, c. s., A. G. O.

Appel, A. H., First-Lieutenant and Assistant-Surgeon.
—Relieved from duty at Willer's Point, N. Y. H., and
to report in person to Commanding General, Department
of Dakota, for assignment to duty. S. O. 164, c. s., A. G. O.

RICHARD, CHARLES, FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—Relieved from duty at David's Island, N. Y. H., and to report in person to Commanding General, Department of Dakota, for assignment to duty. S. O. 164, c. s., A. G. O.

CARTER, W. F., FIRST-LIEUTENANT AND ASSISTANT-SUR-GEON.—Relieved from duty at Fort Monroe, Va., and to report in person to Commanding General, Department of Texas, for assignment to duty. S. O. 164, c. s.,

STORROW, SAMUEL A., MAJOR AND SURGEON.—Died at San Francisco, Cal., July 12, 1879.

# PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, AUGUST 16, 1879.

## ORIGINAL COMMUNICATIONS.

THE USES OF THE HOT-WATER DOUCHE IN PARTURITION.

BY ALBERT H. SMITH, M.D.

Read before the Philadelphia County Medical Society, April 23, 1879.

N selecting the subject of this paper for the consideration of the Society, my purpose has been, not to attempt any abstruse scientific essay belonging to the exclusive domain of the specialist, but to bring before you some of the simple suggestions of practical experience which may be useful to the average physician and available in his every-day work. In obstetric practice especially do we have to deal with cases of emergency,—cases where life seems to be held in the very hands of the medical attendant, and where the result will often depend upon the instantaneous selection and ready application of the proper means of relief. We may have no time for placebos, no time for drawing upon the supplies of the pharmacist, but must apply at once whatever is within our reach that offers us any promise of success. It is therefore in obstetric practice especially that it is desirable to study the availability of simple remedies and uncomplicated methods of practice, and the possibility of making use of the supplies of the household for our "armamentarium." In fact, I look upon it as one of the most important desiderata in medical practice generally to enlarge the list of crude and unartificial remedial measures drawn either directly or closely from the store of nature, not only in adopting her suggestions in the use of external influences of a hygienic character, such as atmospheric changes, variations of temperature, dietetic regulations, and others, but also in making available the resources which she has freely provided, and which may be obtained more readily than the productions of art. And it would seem particularly suitable that in obstetric practice, when we deal mostly with simple physiological conditions, that nature should be aided and stimulated by her own supplies with as little modification by art as possible. rather than by a resort to supposed specifics from the hands of the pharmacist, leaving these, at any rate, until the simples have

failed. Now, as one of these simple, always available, articles, in every household, with the rich and the poor, I wish to call attention to the great range of usefulness of hot water in the defective processes of labor.

I do not propose to discuss the method by which hot water exerts its influence upon the involuntary muscular fibre, by virtue of which it becomes an agent in promoting uterine contraction in the first or dilating stage of labor, and in securing that contraction with the closure of the patulous sinuses in the third stage, and further in controlling hemorrhages from lacerated surfaces beyond the operation of the uterine muscular system altogether. merely put it forward as a fact proven by experience that such effects do follow its proper application: 1st, that a stream of hot water thrown upon the cervix uteri or the rim of the undilated os will stimulate contraction of the longitudinal and oblique muscular fibres of the uterus into an expulsive effort, while the circular fibres surrounding the os relax under its influence: 2d, that a similar douche thrown into the cavity of the relaxed and bleeding uterus, after the expulsion of the fœtus or the placenta, will produce prompt and vigorous condensation of the uterine walls, with an immediate closure of the sinuses; and, 3d, that a like application to a bleeding surface from laceration in the passage of the child through the pelvic canal will arrest the hemorrhage at any point, whether it be from a tear of the circular artery in the cervix, or from rupture of the vascular tissues upon the anterior margin of the vulva about the vestibule, or from the furrows upon the posterior wall and the labia. By hot water I mean that having a temperature of 110° to 115° Fahrenheit, lower than this being useless, and higher than this causing pain from the scalding sensa-tion produced. Tepid water appears to have no specific influence in exciting uterine contraction, and decidedly favors oozing from torn surfaces, and active bleeding from open vessels.

As to the history of this hot-water application in parturition, there seems, strangely, to be no one advancing a claim to its paternity.\* It seems to have followed as a probable and legitimate prompting of

<sup>\*</sup> I am informed that S. W. S. Whitwell, of San Francisco, has claimed in one of the medical journals the priority of suggestion; but I have been unable to obtain his article.

Dr. Emmett's suggestion-so successfully adopted now for many years by gynæcologists-of the use of the vaginal douche of hot water in diminishing congestion of the cervix uteri, and in lessening bleeding from the uterine cavity in any diseased conditions attended by hemorrhage. first step in advance towards its use in obstetric practice was its application simultaneously, by a number of practitioners, for the arrest of hemorrhage in the first stage of abortion, with the os uteri still undilatable, this proceeding having in some cases been More than attended with happy results. forty years ago, Kiwisch suggested and put in practice the use of the alternate douche of cold and warm water as a means of bringing on uterine contraction in producing premature labor; but he appears to have used it only for the purpose of causing a shock upon the uterus by the sudden change of temperature, and for the relaxing effect upon the circular fibres of the os, which he claimed was the essential element in labor. He does not appear even to have

used hot water, merely tepid. Let us consider, first, the application of the douche to the cervix for stimulation of the expulsive effort and relaxation of the This I have found thoroughly and rapidly effectual in the first stage of normal labor at full time, almost equally rapid in a rigid condition in an accidental premature labor, and more slowly-though with ultimate effect-in the induction of labor in a quiescent uterus. The method The patient of application is simple. should lie upon her back, with a bed-pan placed far under her sacrum, so that there should be no danger of the water getting upon her clothing. The bed-pan should be of a large size, and should be ordered by the accoucheur in every case where it is at all within the reach of the patient's circumstances (or it may generally be borrowed from house to house among the poor), as a necessary part of the appointments of the lying-in chamber, being needed not only at times for the purpose immediately under consideration, but, as will be seen further on, desirably, and I think absolutely, for the treatment of the uterus in the third stage in every case. The injection should be thrown into the vagina with a syringe with a rubber tube ending in a metallic or other solid nozzle. Special syringes have been devised for this purpose, and particularly for use in injecting the uterine cavity after placental delivery; but any of the ordinary tube-syringes may be made to answer. For this purpose I prefer the Davidson bulb-syringe (or some of its many imitations, with which our market is now so well supplied), the advantage being that a stream can be driven with more force and with the intermittent action necessary to that instrument. A fountain- or bag-syringe may be used almost equally well, and the intermittent forcible stream produced by having it suspended from a considerable height and interrupting the current by compression of the supply-tube by the fingers or the clamp-valve upon it. Or, in the absence of either of these manufactured instruments, a large tin funnel can almost always be found, and a piece of gum tubing — which can always be procured in cities, and which every country practitioner should carry with him for many useful purposes—be attached and carried into the vagina, even without a nozzle, the water being delivered from the open end of the tube, and the stream being regulated by pressure upon the tube with the finger. With the Davidson or other bulb-compression syringe there is supplied a long vaginal nozzle or pipe (of metal) having several holes in and around the end, no one of which is large enough to deliver a It is better, therefore, to full stream. ream out the hole in the end fully as large as the calibre of the pipe, so that the whole amount of water delivered to the pipe may be thrown in one stream upon the cervix. This can be done easily with a pair of sharp-pointed scissors,—the metal being quite soft,—and any sharp or rough edge smoothed down. A slight curvature may with advantage be given to the pipe, it being flexible enough to enable this to be readily done. With the fountain-syringe there are usually supplied glass pipes, the holes of which are sufficiently large. The apparatus being ready and the patient in position, from a quart to three pints of water may be thrown into the vagina, the pipe being directed against the cervix, not into it. Stress should be placed upon this, inasmuch as a forcible stream thrown into the canal against an unruptured membrane might easily tear it prematurely; and if the membranes be ruptured, the hot water would be projected into the uterine cavity against the fœtus or retained around it, to its possible injury. The nurse may safely

be allowed to make this injection, as the axis of the cervix or pointing of the os will be so obliquely backward that it will rarely be the case that the stream will enter directly into the orifice. This may be repeated every hour or two, according to the demands of the case or the violence of its results. In some cases the effect is almost instantaneous; a rigid cervix in a uterus slowly contracting will be found to soften down soon after a single injection, and the uterine muscle will be thrown into a state of active expulsive movement, the pains recurring with increased frequency and intensity. In others the effect is less rapid, though always marked. The violent increase of pain, not attended by a commensurate activity in dilatation, may make it necessary to diminish the frequency of the applications; but in most cases this difficulty may be admirably met by combining the injection with the administration of chloroform during each returning pain, the relaxing effect of the anæsthetic upon the cervical fibres exactly complementing the deficiency of action of the douche. In operating for the induction of premature labor the injections may have to be repeated for a greater or less time, and at various intervals, in different cases, before labor pains are developed; but, so far. I have seen better and safer results than from any other mechanical method, and decided advantages over any internal remedy recommended until lately. experiences reported by some of the German obstetricians recently, in the action of pilocarpine hypodermically in developing prompt contraction in a pregnant uterus, would seem likely, if confirmed, to place it higher in the scale of abortifacients than anything hitherto advised, and its sudden effect in relaxing the cervix and producing labor pains would render the use of the douche unnecessary.

The effect of hot water locally seems to be very similar (though perhaps much more marked in some cases) to the action of quinia constitutionally, and I am in the habit frequently of using them both, the one acting as an aid to the other. action of the drug continues, in most cases, more persistently, running on through the various stages of labor without need of repetition, and may be used when the administration of the douche may be inconvenient or objectionable; but in cases of inertia or rigidity continuing obstinately

after the quinia has had time to act. I use. with excellent effect, the hot water as above advised. Its well-marked influence upon the cervix in increasing its dilatability makes it a most valuable resort in cases where the presenting part of the child does not enter fully to dilate the os, as in occipito-posterior positions with defective flexion; want of proportion between the pelvic strait and the child's head; contracted pelves; shoulder presentations, with rigidity and closure of the os, before or after rupture of the membranes,—in short, in any case where a rapidly-increased relaxation of the cervical fibres is desirable for obtaining greater facility of manipulation in either the instrumental or manual operations.

But it is in the hemorrhagic conditions of the parturient woman that we find the crying demand for simple, available, and effective remedies, and it is just in the emergencies of such conditions that the hot-water douche so fully meets our wants. and gives us not only the cure, but, if used habitually, the preventive also. In these cases we have the advantage of utilizing another power possessed by the stream of hot water besides its excito-motor influence upon uterine muscular fibre,—viz., that of arresting the flow of blood from small, open vessels and from oozing surfaces. That it does possess this power in a remarkable degree is clearly established by much clinical observation, and, from some cases that I have had an opportunity of watching, I am inclining to the belief that it possesses it to the extent of absolute control of hemorrhage in cavities where continuous irrigation-with the temperature of the water maintained at 110° to 115°—can be kept up (even where there is no aid from muscular contractility of the tissues), in bringing together the cavity I do not attempt any rationale of the action of the hot-water stream in developing this result; I only state the positive fact, the effect being too frequently observed and too uniformly produced to warrant the assumption of its being a mere coincidence. My purpose in bringing the subject before the Society is to call attention to the conditions under which its use is demanded, and the ready method of its application.

In order to avail ourselves of the benefit of the hot douche in hemorrhage in pregnancy, we need, firstly, the free and unobstructed play of the muscular contractility of the uterus, and especially, secondly, access of the stream directly to the bleeding surface. In hemorrhages from abortions, from premature detachment of the placenta (later or at full term), and from retained or partially adherent pla-centa in the third stage of labor, we cannot therefore expect to derive full and prompt benefit from the douche, because we have not these two conditions fully present, having the portion of ovum acting as a splint to keep distended the uterine cavity and the patulous orifices of its venous sinuses, and also acting as an obstruction to prevent the ingress of the stream. In these cases, then, before using the remedy with effect, we must empty the uterus. Now, in obedience to the organic law of uterine contractility, if this be done completely, the cavity will be obliterated. and the bleeding will cease from the placental surface, and, except as a preventive of relaxation afterwards, or as a cleansing measure, the douche will not be needed.

Whether or not the hot-water stream may be made available in the early stages of bleeding from placenta prævia I cannot say, as I have never, since resorting to its use, had a case under care from the beginning, having been called to cases only where there was indication for immediate delivery. But I shall not hesitate to make use of it as a safe experiment whenever an opportunity may arise, and I would suggest to my professional friends to try it. As a promoter of uterine contraction and dilatation of the os uteri it must be serviceable, and its power of diminishing bleeding can be soon determined by watching the returning stream as it pours from the vulva into the vessel placed to receive it, the degree of its success being shown by the amount of discoloration of the stream. If we find the water becoming clearer and clearer, until all color ceases, we know positively that the blood has ceased to flow from the uterine surface. At any rate, the experiment in placenta prævia can be attended by no risk.

The condition in which we get the most signal effects from the douche is that of uterine inertia after the placental delivery, and in this condition I am inclined to think that we have an absolutely reliable agent to control bleeding,—an agent which may reduce the terrors of post-partum hemorrhage, and make its fatal termination an almost impossible event if applied at any

time while power of reaction is not entirely exhausted. The dangerous use of iron and other styptic injections will then be without excuse, and the study of prophylactic measures a matter of little moment.

For this purpose no other apparatus is needed than that already described. cial tubes are not required. The ordinary vaginal nozzle of the Davidson syringe, prepared as before suggested, will be found as useful as any other. In applying it the patient is turned upon her back; if a pan is at hand it should be used, but if not, the urgency of the case requires that there shall be no delay; the water is placed in a vessel,—preferably a small pitcher or deep basin,—to the bottom of which is dropped the supply-tube, and carefully held there that no air may be drawn into the instrument. If carbolic acid or other disinfectant be at hand, put a suitable quantity into the water (of carbolic acid f3ii of ninety-per-cent, solution to the pint: of Labarraque solution f3ss; if neither of these, a tablespoonful of common salt may be quickly dissolved). The temperature may be guessed at by the accoucheur if no thermometer be had, or, if the case is very urgent, letting it be just hot enough not to be painful to the hand. The nozzle is then carried, upon the index-finger of the hand corresponding with the side of the patient towards the operator, to the vicinity of the vulva, the bulb compressed by the nurse or other assistant until all air has been forced from it; then carried into the vagina, while the opposite hand grasps firmly the uterine globe. The fingers in the vagina may be moved about freely to break up clots rapidly, there being sometimes a complete distention of the vagina with firm, hard coagula. The stream is kept up continuously, washing out as fast as the clots are loosened; the nozzle is to be carried to the os uteri, and directed into the orifice. If the coagula in the uterus are loose and not abundant, the force of the stream may be sufficient without carrying the finger into the uterine cavity, but if the hemorrhage has been great, and the uterus largely distended, it is better boldly to introduce the pipe, guarded by the finger, and, moving it around gently, let it, with the aid of the stream, detach from the intra-uterine surface all shreds of membrane or small coagula which may be found adherent to the surface, and which, if not removed, will

act as centres of coagulation. While this is going on, the hand upon the uterine tumor feels it steadily and, generally, instantly contracting, condensing itself into a firm, hard mass, receding completely into the pelvic cavity below the brim. The water passing from the vulva is soon observed to be free from color, and the hemorrhage is arrested. A uterus after such accident ought to be carefully watched and compressed in the hand of the accoucheur or of an assistant until all probability of secondary relaxation is over. Yet, so far it has not been found necessary to resort to a second injection. In only two cases since using it has it failed; those occurred very early in my experience with it, and I believe I only resorted to the use of ice because my confidence in the hot water had not been sufficiently established. Judging from all experience since then, a perseverance with the douche would probably have rendered the ice unnecessary.

Finding the use of the douche so successful in controlling hemorrhage, it has naturally followed to adopt it as a preventive, and for nearly two years past I have been resorting to its use habitually (or at least wherever at all easily practicable) in every case of labor. The apparatus is made ready during the latter stages of labor, and so soon as the placenta is delivered, the douche is administered precisely as just directed for the relief of hemorrhage, except that it will rarely be necessary to carry the finger and the pipe farther than to the os uteri (the internal os, the external os and cervical cavity being expanded at this stage). The vagina is thus cleansed and disinfected by the water. medicated as before,—the clots are washed from the lower segment of the uterus, and the organ stimulated to contract,—which it does firmly, rarely showing a disposition to relax, and often remaining low down in the pelvic cavity below the brim for twenty-four hours; and in no case so far, where satisfactorily done, has any flooding occurred after it. After-pains are diminished greatly, and the lochia but slightly abundant.

As to any danger from the absorption of the carbolized solution, it seems almost impossible, where the outlet of the uterus is so patulous as it is after labor, that any fluid could be retained in its cavity long enough to be absorbed; but the recent statements of so reliable an authority as Fritsch, that serious consequences have

followed its use in some cases, would make it desirable that every precaution should be taken against such retention.

If, then, the hot douche can give us the positive results claimed and established by experience, it must certainly be admitted to have superior merits to all other methods of checking hemorrhage. Over ice, which I regard as infallible in its stimulant power over a relaxed uterus, it has the advantage of greater availability, and certainly of greater stimulating power to the system already depressed by loss of blood, as well as of giving much more comfort to the patient in its use. Over the medicated solutions, vinegar, lemon-juice, and especially the dangerous persalts of iron, its advantages need scarcely be dwelt upon.

But it is not only in puerperal hemorrhages from the placental site that we find a panacea in the hot-water stream; in the other class of cases of laceration of the cervical and vaginal tissues we find it equally effectual. We may have the uterus firmly closed down, the os uteri free from clots, and feel sure that there is no flow from the uterus, and yet there may be a profuse flooding from the vulva, -not the rushing torrent of dark coagula forced from the distended uterus, but a steady stream of arterial blood, rapidly weakening the patient ad deliquium; and we recognize this as proceeding from some ruptured vessel opening from a lacerated cervix or a furrow in the vaginal wall. Here also a resort to the douche promises the happiest results, as I can speak from experience and observation of a number of cases, in some of which violent hemorrhage has been promptly arrested when caused by a rupture of the circular artery, which in the puerperal cervix is of very large calibre. I had the privilege of seeing a case in the obstetrical ward of the Woman's Hospital, in this city, recently, -which I believe stands entirely alone so far as treatment is concerned,—where a profuse and rapidly-exhausting secondary hemorrhage from the circular artery, bursting out seven days after delivery, was treated successfully by the continuous irrigation for two hours with the hot-water stream.\* Such cases as this, treated by

<sup>\*</sup> Since the writing of this paper this case has been fully reported, in connection with two others of remarkable interest, in a clinical paper in the New York Medical Record for May 3, 1879, by Dr. Anna E. Broomall, Physician-in-Charge of the Woman's Hospital of Philadelphia, under whose care its treatment was conducted.

the plan recommended by high authorities,
—by styptic applications and tampons,—
are attended with great suffering to the
patient, are loathsome to the practitioner
who has to handle them, and are often followed by pelvic cellulitis of an alarming
and even fatal character.\*

Another application of the hot douche is in the relief of after-pains, which, when very severe, can always be greatly alleviated, and, in cases dependent upon the presence of coagula alone, entirely arrested by its use. The nozzle of the syringe is to be carried upon the finger to the os uteri, and introduced far enough to enable a strong current to be projected into the cervix and uterine cavity, when the coagula are washed out and the uterine fibre condenses itself. I have made this application, with complete relief, in a number of cases in which in previous labors after-pains had persisted exhaustingly for days.

It may seem like a paradox in nature that an application which apparently diminishes the vascularity of a part should stimulate its vitality and capacity for reparative processes; yet it is nevertheless a fact, giving additional value to the hotwater douche in the complications of parturition, that in cases where, after longcontinued contusing pressure of the head, we find the vagina in a state approaching disorganization, looking like a piece of beef-liver, a stream of hot water thrown upon it will perceptibly freshen it up and save a slough; and the edges of a laceration of the perineum, which appear contused beyond power of union, subjected to this treatment before being drawn together with sutures, will often unite without a flaw in their adhesion.

1419 WALNUT STREET, PHILADA., April, 1879.

#### IS PARACENTESIS OF THE PERI-CARDIUM A JUSTIFIABLE OPER-ATION?

BY JOHN B. ROBERTS, M.D., Lecturer on Anatomy in the Philadelphia School of Anatomy. Read before the Philadelphia County Medical Society, April 23, 1879.

I HAVE announced the subject of the present paper in the form of a query, not because there is any question in my

mind as to the answer, but because I feel that there is in the profession a disposition to look upon this operation as one of the gravest prognosis, which should only be attempted when the patient is moribund. Now this is an error which should be combated with all our might, for, after studying the literature of this subject for several years, and collecting all the cases to which I have access, I unhesitatingly assert that, in my humble opinion, pericardial effusions are susceptible of treatment similar to that suited to pleural effusions. Yet I feel confident that patients have died, and do die every year, because the attendant has been too timid to thrust a trocar into the pericardium, to relieve the enfeebled heart of the hydrostatic pressure which is endeavoring to prevent its every pulsation. will see that these fears are well grounded when I say that the operation was proposed over two hundred years ago, and yet I find recorded only seven instances of the operation having been done in Admitting that some unsuccessful cases have never been published, and that a few reported ones have escaped my eye as I have turned over the indexes of many volumes, I cannot believe that large pericardial effusion is as uncommon as these numbers would seem to indicate. Rheumatism and thoracic inflammations, which are the great factors in the etiology of pericarditis, are too frequent among us to allow any other explanation of these figures than that pericardial effusions are treated only by medical means, and abandoned if absorption is not accomplished.

When tapping the chest in cases of pleuritis with effusion was introduced, it was the custom to wait many weeks before using operative means for withdrawing the fluid; and many autopsies showed the results of this protracted delay in thickened pleuræ, compressed and useless pulmonary tissue, and perhaps even fistulæ, which showed the attendant that nature had done what he had been afraid to attempt. In course of time we learned to recognize the value of paracentesis of the chest, and improved instruments gave it a wider field. Doubtless a similar history will be told of tapping the pericardium as soon as the profession shakes off the feeling that the heart and its covering will not bear operative interference, and learns that the operation is much less serious than the retention of a large amount of fluid

within the pericardial sac.

<sup>\*</sup> These experiences would give promise of invaluable results in controlling the profuse hemorrhages attendant upon operations for the removal of malignant growths in the pelvis, where the operator often is compelled to cease work until the bleeding is controlled by styptics. A continuous irrigation might be kept up during the operation, without interfering with the work

The causes of pericarditis are too well known to all to require more than a passing notice at this time, and it would perhaps be considered presumptuous in me to attempt to instruct you in the symptomatology, physical examination, and diagnosis of effusion in the pericardium. I shall, however, sketch briefly the main points concerning these topics, in order to bring my subject systematically before you. Pericarditis as a complication of rheumatism is often seen by all of us, though it is not usual for it to assume characteristics of great gravity. Occasionally the fluid effused increases rapidly, and the oppression resulting may result fatally. It is in such cases that the most brilliant results have followed tapping, because the distended sac is immediately relieved of its contents, and the primary disease is one of favorable prognosis. Again, pericarditis may occur from the extension of pulmonary inflammations. when the prognosis is rather less favorable than in the former instance. Any condition liable to favor the transudation of serum into the cellular tissue and cavities of the body may be the exciting cause of hydropericardium; especially is this the case in chronic Bright's disease of the kidneys.

The symptoms of dropsy of the pericardium are of little value, and we have to rely upon physical exploration to make out the diagnosis. The increased dulness, the feebleness of the heart-sounds and apexbeat, and the frequent presence of a friction-murmur suffice, as a rule, to establish the character of the lesion. At times, however, the differential diagnosis between a feeble, dilated heart and a pericardial effusion becomes a matter of considerable difficulty; and this, in fact, is to my mind the only unsatisfactory part of the subject. The operation is easily and expeditiously done, the relief is immediate, and the aftertreatment simple; but if there be any doubt in the mind of the surgeon as to diagnosis, Very fortuthese points are of no value. nately, in the vast majority of patients a certain diagnosis can be established after a careful physical examination has been instituted.

With these prefatory remarks I shall enter upon the consideration of the operation of paracentesis of the pericardium itself, discussing the methods of operating, the best point of puncture, the kind of cases to which tapping is adapted, and, finally, the results which have been obtained, as shown by a compilation of the

cases that I have collected from various There will be little probability sources. of any dissenting voice when I say that the best method of puncturing the sac is by aspiration. An ordinary trocar has been used, and some of the older operators preferred to dissect first through the integumentary and muscular layers until the distended pericardium was reached, but this is not as satisfactory as thrusting an aspirating trocar or needle directly through the thoracic wall; though perhaps the tough integument may be incised first and the skin drawn down before the needle is in troduced. The vacuum chamber ought to be attached to the canula as soon as its point is buried, in order that the flow of serum may tell when the pericardial fluid has been reached. Otherwise the instrument might be thrust onward into the right ventricle, for the thoracic wall is not thick. Roger and Dieulafoy both recommend that the puncture be made in the fifth intercostal space, which is on the level with the well-known notch in the border of the left lung, exposing the pericardium in that The internal mammary artery lies, according to some measurements that I have made, about one-fourth to one-half inch from the edge of the sternum at this point. It is pretty sure that in most cases the pleura must be wounded, because it is reflected over the pericardium from the costal cartilages: hence the aspirating needle penetrates both layers of pleura before it enters the pericardium. In chronic purulent pericarditis there is very probably adhesion here, which is of value, as it precludes the possibility of the pus escaping into the pleural cavity. A small puncture is of importance in all cases for the same reason. As it, therefore, seems hardly possible to avoid puncturing the pleura, the object to be avoided is the mammary artery mentioned above: hence the needle should be introduced between the artery and the nipple. A point well chosen is in the fifth space, about one and a half inches from the middle line of the sternum, which, by the way, is more readily determined than the left edge of the bone, since the tissues prevent accurate determination of this border.\* operator must also recollect the fact that the intercostal spaces become narrow as they

<sup>\*</sup> This question will be found fully discussed in a monograph shortly to be published, entitled "Paracentesis of the Pericardium: A Consideration of the Surgical Treatment of Pericardial Effusions."

approach the sternum, and that the cartilages of the lower ribs are inclined obliquely upwards. Unless these anatomical points are thought of, the needle may be thrust into the cartilage and necessitate a second selection of a place for operation.

You may ask what cases are suitable ones for paracentesis pericardii. The reply to this question would be, that in all cases of pericardial effusion in which medication has failed to relieve the heart by reducing the quantity of fluid, and in which grave symptoms supervene, the aspirator should This should not be resorted to at once. be delayed until the patient is worn out, the lungs engorged, and the pericardium converted into a pyogenic membrane, but should be thought of, as it is in pleural effusion, as soon as the inadequacy of drugs is evident. The most brilliant results are obtained in cases in which sudden serous effusion of great amount has occurred in articular rheumatism; here the withdrawal of the fluid averts all danger, and the patient recovers of his rheumatic fever in a few weeks. When there is Bright's disease. chronic pleuro-pneumonia, or purulent pericarditis, it is not to be expected that the success obtained will be so perfect.

Finally, let us take a moment to glance at results. After much research among files of journals, and considerable correspondence, I have at the present time collected forty-nine cases of paracentesis pericardii which I believe to be authentic; of these, twenty-three recovered and twentysix died. This gives nearly forty-seven per cent, of recoveries, which I consider very encouraging, if we remember that many of the cases were complicated by serious disease of other organs.\* It is not worth while to burden you with dry statistics, but the above is a good showing, even if we admit that unsuccessful cases of surgery are proverbially difficult to find in periodical medical literature. The brilliant success attending Dr. Pepper's case recently reported is sufficient to attract the attention of all, and will doubtless do more to convince you than anything that I have said.

If the fluid reaccumulates, the tapping is to be repeated, and if it becomes purulent, a drainage-tube, or, better, perhaps, a canula, may be left in the wound. Such, then, are the points in regard to this operation that I wished to bring before you

\* New York Medical Journal, December, 1876. † American Journal Medical Sciences, April, 1879. this evening. In response to the query that serves as a caption to this paper, I would say, paracentesis of the pericardium is certainly a justifiable operation; nay, more, it is at times imperatively demanded, and he who refuses to give the patient such a chance for his life in proper cases is as guilty as he who allows a child to die unborn because he delays the application of the forceps.

#### CHILD-BIRTH AFTER OVARIOT-OMY.

BY J. EWING MEARS, M.D., Surgeon to St. Mary's Hospital, etc.

THE Philadelphia Medical Times of July 26, 1873, contains the report, by myself, of a case of ovarian disease, in which ovariotomy was performed successfully by the late Dr. W. L. Atlee. It is recorded as Case 243 of his series of operations, and is headed, "Multilocular Ovarian Tumor: Extensive Parietal, Omental, and Hepatic Adhesions; Incision Five

Inches in Length; Recovery.'

The history states that Mrs. S., of Missouri, was 27 years of age, married when 21, and had borne one child five years ago. The abdomen was very large, measuring round the umbilicus fifty-one inches, from sternum to umbilicus sixteen, to pubes twenty-eight, and between the ilia thirtythree and one-half. The condition of the patient was not favorable; the lower extremities were much swollen, and she was very much emaciated. The tumor was multilocular, weighed with contents sixty pounds, and involved the right ovary. The adhesions were extensive and very firm; those attaching the tumor to the liver were especially dense and strong, and their detachment was followed by quite profuse hemorrhage. The parietal layer of the peritoneum was thickened, and covered with large ecchymosed and discolored patches. point could be seen the smooth, glistening surface characteristic of the structure in its normal condition.

The incision was necessarily long, and the efforts required to control the hemorrhage provoked by the separation of the adhesions caused a prolonged exposure of the viscera of the cavity to the air. Notwithstanding the unfavorable condition of the patient, and the complications encountered in performing the operation, she made an excellent recovery.

To-day (July 22, 1870), Dr. Thomas H. Sherwood, of this city, under whose care the patient was, informs me that she was recently confined, and gave birth to a strong, healthy child, nearly thirteen years from the time of the birth of her first child, and nearly eight years after the

operation of ovariotomy.

Although pregnancy and delivery at full term after ovariotomy are not unusual occurrences, they are of sufficient importance to justify being placed on record. Especially is the present instance one of interest, by reason of the conditions which were present, and which at one time gave but little hope of life, much less of such a restoration to health as to return to the patient the power to perform normally the functions of her sex.

Other instances of pregnancy and delivery at full term of the child, after ovariotomy, occurred in the practice of Dr. Atlee, but I do not believe any of the cases were so unfavorable as that of Mrs. S. Mr. Spencer Wells reports thirty-five cases of ovariotomy in single women, who, subsequent to the operation, were married Two of this and gave birth to children. number had twins. Of two hundred and fifty-nine married women, he reports twenty-three who had one or more children after operation.

## THE THERAPEUTIC USE OF ESERINE IN GLAUCOMA.

BY M. LANDESBERG, M.D.

VITHOUT drawing any hasty con-VV clusions, giving merely the results of my observations, I published in this journal (see Philadelphia Medical Times, October 26, 1878) two cases of glaucoma successfully treated with eserine, the antiglaucomatous properties of which had been discovered by Lagueur. The continuation of my experiments with the new remedy in glaucoma did not answer the expectations aroused first by my own successes and by the praises given by Lagueur and Weber. A permanent cure was in no instance observed; the primary improvement was always followed by relapses, with more severe symptoms of irritation and with more pronounced impairment of vision.

In regard to the extravagant hopes with which the new remedy was hailed here and there by the profession,—that, instead of an unreliable operative procedure, we have at

last succeeded in gaining a sure remedy against one of the most insidious diseases, a remedy which every practitioner may use,-I feel called upon, after the publication in this journal of the successes obtained with eserine in glaucoma, to lay before the general profession the further results of my experience, and to assist in destroying a medical illusion dangerous both to the physician and to the patient.

I will give first the after-history of the two cases which have been already published, and then the other cases of glau-

coma treated with eserine.

Case I.-C. R., baker, 25 years old, March

6, 1878.

Eve. — Glaucoma secundarium. Right Opaque staphyloma of the cornea in its upper third. Anterior synechiæ. Deep excavation of the optic disk. Spontaneous arterial pulsation.  $V = \text{hardly } \frac{5}{200}$ , and Jaeg. 19, with

A solution of eserine, one grain to three drachms, was applied, on the first day, one drop every hour; on the second day, one drop every two hours; on the third and fourth

days, one drop every three hours.

On the fourth day, intraocular pressure was normal; excavation of the optic disk diminished; staphyloma less prominent;  $V = \frac{10}{200}$ . The continuation of the use of eserine (one to two drops a day) for two weeks caused the glaucomatous symptoms to disappear entirely. Vision was brought to  $\frac{20}{200}$ , and Jaeg. 7.

This favorable condition remained until the first days of September, when glaucomatous attacks set in again, and staphyloma gradually increased. Instillation of eserine, which patient applied of his own accord, seemed at first to afford some relief. But the remedy soon failed, and the morbid process progressed.

October 29, I found the following condition: Right Eye.—Glaucoma acutum; staphyloma as large as a pea; cornea dimly dotted; aqueous humor turbid; tension = T. 3; deep excavation of the optic disk and spontaneous arterial pulsation; counts fingers at 2'.

A fresh solution of eserine was applied

without producing any effect.

Iridectomy, made November 1, brought prompt recovery.

Examination made May 10, 1879, showed *Right Eye.*—V. =  $\frac{20}{100}$ ; resp.  $\frac{15}{70}$ ; Jaeg. 4; flat staphyloma corneæ; tension normal; optic disk somewhat flat; vessels and retina normal.

Case II.—P. W., laborer's wife, 75 years

old, July 5, 1878.

Right Eye.—Chronic glaucoma; cornea flat, of diminished sensibility, and occupied by punctiform exudations; anterior chamber almost obliterated; pupil dilated ad maximum, immovable; tension = T.2; deep excavation of the optic disk; spontaneous arterial pulsation; amaurosis.

Left Eye.— $V = \frac{20}{70}$ ; with + 10, Jaeg. 6; anterior chamber shallow; pupil somewhat dilated, of slow reaction; tension and field of vision still within physiological limits; optic disk pale, slightly excavated, surrounded by a small atrophic ring; arteries somewhat thin; veins somewhat distended.

Patient is suffering from severe ciliary neu-

ralgia, causing sleepless nights.

On the use of eserine, neuralgia entirely subsided, and tension decreased. General condition improved.

After seven weeks' observation I lost sight

of the patient.

In January of this year I was told by the daughter of the patient that the latter had died about Christmas of consumption, after having suffered in the last weeks of her life from intense paroxysms of pain and diminu-tion of vision of the left eye. From the description of the symptoms we may infer that there had been acute attacks of glaucoma. The drops of eserine which patient had in store had been used also on this occasion, without, however, having been able to check the loss of sight.

Case III.—A. D., saloon-keeper, 58 years

old, September 23, 1878.

Right Eye.-Glaucoma subacutum; aqueous humor slightly turbid; anterior chamber shallow; pupil moderately dilated, immovable; optic disk slightly excavated; spontaneous venous pulsation; Hm.  $\frac{1}{16}$ ; V.  $=\frac{20}{1000}$ ; Jaeg. 9, with +6; tension =T. 1; field of vision limited in the upper inner quadrant.

Left Eye.—Refracting media normal; pupil of normal shape, but of slow reaction; optic disk reddish; veins somewhat hyperæmic and slightly tortuous; tension and field of vision normal; Hm.  $\frac{1}{24}$ ; V.  $=\frac{20}{30}$ ; with +6, Jaeg. 2. Operation being refused, I ordered eserine:

for the right eye, one drop every two hours,

for the left eye, one to two drops daily.

After an eight days' use of the remedy there was a considerable improvement in the condition of the right eye. But on the thirteenth day acute glaucoma broke out, with almost total loss of vision.

On iridectomy, recovery was very slow, in-

terrupted by frequent exacerbations.

The final result was,  $V_{\cdot} = \frac{15}{100}$ ; with +6, Jaeg. 8; tension pathologically increased.

The history of the left eye is as follows: In the first weeks succeeding the iridectomy of the right eye, when the symptoms of irritation were very violent, the condition of the eye was very satisfactory. Tension was normal; optic disk only slightly hyperæmic, and veins slightly tortuous. On the tenth day after the operation, patient began to complain of dimness of vision. On the eleventh day prodromal symptoms of glaucoma set in; on the fourteenth day there was subacute glau-

Eserine had been used all the time, one to two drops daily.

Six hours after the attack.—Iridectomy upwards; recovery normal. Result.—Hm.  $\frac{1}{30}$ ;  $V = \frac{20}{30}$ ; with + 10, Jaeg. 1, from 8''-13''. Case IV.—C. D., driver, 49 years old, Oc-

tober 11, 1878.

Right Eye.—Glaucoma subacutum; anterior chamber shallow; pupil moderately dilated, immovable; deep excavation of the optic disk, which is surrounded by an atrophic ring; arteries thin; veins tortuous; tension = T. 2; field of vision limited upwards-inwards, almost up to the point of fixation;  $V = \frac{20}{10}$ ; with + 10, Jaeg. 8.

Left Eye.—Normal.

Operation being refused, I prescribed eserine, to be instilled three to four times a day.

In March of this year patient told me that he had used the drops irregularly for about six weeks without any avail.

Examination showed Right Eye.—Descemet's membrane dimly dotted; anterior chamber shallow and turbid; pupil dilated above the medium, immovable; fundus oculi veiled;  $V = \frac{5}{200}$ ; with +6, Jaeg. 23; tension = T. 1.

Left Eye .- Normal.

Case V.-E. T., laborer's wife, 52 years old,

December 25, 1878.

Left Eye. - Glaucoma acutum; pupil dilated ad maximum; intraocular pressure = T. 2;

and maximum; intraocutar pressure = 1.2; fundus oculi veiled;  $V = \frac{5}{200}$ ; Jaeg. 20. Right Eye.—M.  $\frac{1}{15}$ ;  $V = \frac{20}{40}$ ; with +36, Jaeg. 1, from 9''-12''; field of vision and tension normal; slight sclerectasia posterior; in the upward periphery some choroideal atrophies.

December 26.—Iridectomy upwards: re-

covery normal.

On January 4, 1879, subacute glaucomatous

attack of the right eye.

Moderate conjunctival and subconjunctival injection; aqueous humor slightly turbid; pupil moderately dilated; tension = T. 1; optic disk slightly excavated; arteries normal; veins somewhat distended; M.  $\frac{1}{18}$ ; V.  $=\frac{20}{70}$ ; with + 10, Jaeg. 8; field of vision free. A three days' use of eserine, one drop every

two hours, brought restitution ad integrum.

On January 15, renewed attack of subacute glaucoma, subsiding on eserine after four days, without impairment of vision.

On January 27, third attack of subacute glaucoma, checked by instillation of eserine.

On March 15, attack of acute glaucoma, No benefit with violent ciliary neuralgia. whatever from the use of eserine.

Examination, made March 18, showed

Chemosis conjunctivæ bulbi; cornea dimly dotted; aqueous humor turbid; pupil dilated ad maximum; fundus oculi cannot be seen; tension = T. 2; V. = counts fingers at 8'.

Iridectomy upwards resulted in a perfect

Examination, made April 3, showed Right Eye.—M.  $\frac{1}{18}$ ; V.  $=\frac{20}{40}$ ; with + 36, Jaeg. I, from 7''-12''; very shallow excava-

tion of the optic disk; all other conditions

Left Eye.—M.  $\frac{1}{10}$ ; V.  $=\frac{15}{70}$ ; Jaeg. 3, from 7''-13''; field of vision limited inwards almost up to the point of fixation; optic disk slightly excavated; tension normal.

Case VI.-T. F., baker, 51 years old, Jan-

uary 29, 1879.

Right Eye.—Hm.  $\frac{1}{15}$ ; V.  $\frac{15}{20}$ ; with +8, Jaeg. 1, from 7''-12''. All other conditions

Left Eye.—Glaucoma subacutum; refracting media clear; pupil somewhat dilated; optic disk slightly excavated; arteries somewhat thin; veins hyperæmic; tension increased; field of vision normal on daylight, limited upwards-inwards on gaslight; Hm. 15;  $V = \frac{15}{40}$ ; with + 6, Jaeg. 1, at 5".

Operation being impossible at the time, I ordered eserine, one drop two to three times

I saw patient again February 17, in the following condition:

Right Eye.—Unchanged. Left Eye.—Glaucoma acutum; aqueous humor turbid; anterior chamber almost obliterated; pupil dilated ad maximum, immovable; tension = T. 3; fundus oculi cannot be seen; severe ciliary neuralgia; V. = counts fingers at 4'.

Patient had used eserine as directed, and had been free from any attack until February 13, when the first glaucomatous symptoms reappeared. Eserine had no influence whatever upon the course of the morbid pro-

cess.

Iridectomy upwards brought recovery.

Last examination, made April 18, showed Hm.  $\frac{1}{18}$ ; V.  $=\frac{15}{50}$ ; with +6, Jaeg. 4, shallow excavation of the optic disk, which is surrounded by an atrophic ring; arteries thin; veins somewhat hyperæmic; tension normal some peripheric retinal apoplexies in a state of resorption.

The eye has been all the time free from any

irritation.

Case VII.-G. C., seamstress, 42 years old,

April 9, 1878.

Glaucoma simplex of both eyes; anterior chamber somewhat shallow; pupil moderately dilated, of slow reaction; intraocular pressure = T. 1; field of vision limited concentrically in the periphery; deep excavation of the optic disk, surrounded by an atrophic ring; arteries thin; veins abnormally dilated.

With the exception of a slight cloud before the eyes, any other morbid symptoms are

emphatically denied.

Patient came to me to have suitable spectacles selected, having been obliged to change them seven times within nine months.

Patient was about going to Europe: operation was out of question. I ordered her eserine, to instil in the first weeks two to three drops, afterwards, with intermission, one drop daily.

When I saw her again, October 29, examination showed

V. R. =  $\frac{20}{100}$ ; with +6, Jaeg. 11. V. L. =  $\frac{20}{100}$ ; with +6, Jaeg. 13. Field of vision more limited and tension

increased since the first examination.

Eserine had been used in the two first months, two drops daily; afterwards, for two months, one drop daily; and then until the middle of September, irregularly, one drop daily. Case VIII.—N. O., laborer, 71 years old,

March 21, 1879.

Left Eye.—Large, deep ulceration occupying the pupillary region of the cornea; deep pericorneal injection; ciliary region tender on pressure; anterior chamber very shallow and turbid; pupil dilated ad maximum; tension = T. 2; fundus oculi cannot be seen; V. = counts fingers near by.

I ordered eserine and warm poultices, under which the ulceration healed very rapidly.

leaving only a central macula.

The effect of eserine on the glaucomatous process was favorable in the first days. Pupil contracted a little, intraocular pressure diminished, and the symptoms of irritation abated. But on March 29 exacerbation set in, the eyeball became as hard as stone, and the acute glaucoma kept on, in spite of increased instillation of eserine, until April 4, when a broad iridectomy broke the acme of the morbid process.

Case IX.—K. L., seamstress, 19 years old,

April 12, 1879.

Right Eye.-Leucoma adhærens in the upper half of the cornea; several fresh infiltrations in the centre of the cornea; anterior chamber almost obliterated; tissue of iris disorganized; pupil irregular, not dilated; eyeball as hard as stone; violent cyclitis; V. counts fingers at I'.

I ordered eserine and warm poultices. April 16.—Cyclitis subsided; eyeball softer

than the left one.

April 18.—Tension again = T. 2; symptoms of irritation more pronounced.

April 20.—Eyeball softer than the left one. April 21.—Eyeball as hard as stone. Very violent cyclitis.

On the same day, iridectomy downwards, which in spite of its imperfect issue (tissue of iris being rotten) resulted in breaking the acme of the morbid process.

I frequently used eserine, consequent upon iridectomy, in cases of glaucoma, when the intraocular pressure was fluctuating, with various results. In some cases eserine greatly promoted the decrease of the intraocular pressure, favoring the course of the healing process; in other cases it was of no avail whatever, and in others it seemed rather to increase as well the symptoms of irritation as the intraocular pressure.

With the exception of Case II., eserine proved to be ineffective in glaucoma absolutum.

As the final conclusion from my observations, I must regard eserine not only as an unreliable, and in most cases worthless, remedy in glaucoma, but also as a very dangerous one, which by its primary results may lull both the physician and the patient into a delusive security, endangering thus the favorable chances of another and more efficacious therapeutic procedure. Especially insidious is eserine in the hand of the patient, who, if once benefited by its application in glaucoma, may recur to it in all subsequent attacks, without consulting the physician, until vision has become for the most part irrevocably lost.

1605 ARCH STREET, PHILADELPHIA.

#### TRANSLATIONS.

CARLSBAD WATER IN THE FIRST STAGE OF DIABETES MELLITUS.—Dr. Jacques Mayer asserts as the result of an experience of several years, and extending to seventy-four cases, that Carlsbad water acts favorably in the earlier stages of all varieties of diabetes mellitus, whether of gastro-enteric (chylogenic), hepatic, or neurotic origin. As a result of the use of Carlsbad water, the toleration of carbo-hydrates becomes greater the more carefully and strictly the nitrogenous diet is restricted, not only during the treatment, but at all times.—

Berliner Klin. Wochens., No. 21, 1879.

FECUNDITY AND SEXUALITY.—At a recent meeting of the Société de Biologie, M. Delaunay read a paper upon this subject, in which he asserted that fecundity was in inverse proportion to the elevation of the race. Thus, the colored races are more fertile than the white, and of the latter, those least advanced—e.g., Russia, Spain, Ireland, Italy—are more fertile than the highly civilized, as France and Switzerland. It has been said that the relative sterility of France is voluntary. M. Delaunay protested against this accu-Fecundity diminishes in a race in proportion to its evolution. The educated classes and citizens are less fertile than country-people. The law of Malthus is thus shown to be erroneous.

Inferior races show more females; superior races more males. After thirty-five years a man begets more girls than boys, The strong have boys; the weak girls.

More girls are generated in warm climates and during the summer, and more boys in cold climates and during the winter. In commenting upon these statements of M. Delaunay, M. Gallipe criticised them as not being based upon satisfactory statistics. He called attention to a fact which falsified M. Delaunay's conclusions,—namely, that England, a country in the front rank of civilization, shows remarkable fecundity. [Perhaps the most interesting part of M. Delaunay's paper is the protest against the generally received opinion that the sterility of the French is voluntary.— Ed.]—Le

Progrès Méd., 1879, p. 422.

Cystic Tumor of the Tongue contain-ING CYSTICERCI IN AN INFANT.-M. Lannelongue had under his care an infant two and a half years of age, who for a month previous had suffered from a tumor the size of a pea, hard to the touch and of firm consistency, situated near the point of the tongue, and showing equally above This tumor gave the child and below. much annoyance, and even pain, as it frequently rubbed its tongue between the gums, as if to relieve itself. The tumor was enucleated by means of a canalated sound, and the wound cicatrized within a few days. On examination the tumor was found to be filled with cysticerci. Denonvilliers established the axiom some years ago that whenever a tumor containing liquid is found imbedded in the muscular structures, without inflammation of the latter, it is probably an hydatid cyst.—La France Méd., 1879, p. 365.

PROGRESSIVE OSSIFYING MYOSITIS.—Nicoladoni gives a case of this kind, noting that it was not an exostosis from the bony skeleton, but a primary disease of the muscular tissue itself. A little girl 7 years of age had suffered from more or less stiffness of the neck from infancy. Later the back became affected, and one arm, then one leg. On examination she was found thin and pale. A number of symmetrical bony tumors could be perceived on both sides of the spinal column. The whole trunk was more or less immobile, so that respiration was largely diaphragmatic. Bony deposits were observed in the neighborhood of both axillæ, in the left biceps, and in the muscular tissue of the leg. Nicoladoni gives a careful description of the case, and refers to other similar ones heretofore published. -Cbl. f. Chirurgie, 1879, No. 24; from

Wien. Med. Blätt.

# PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, AUGUST 16, 1879.

#### EDITORIAL.

STATE BOARDS OF HEALTH AS HYGIENIC EDUCATORS,

OUR attention has recently been called to the "Third Annual Report of the State Board of Health of the State of Wisconsin," a public document with which we think the profession of that State may be well satisfied. Though open to criticism in many points, and particularly with regard to the absence of vital statistics, owing to defective laws, yet, as a source of popular instruction in the principles of hygiene, this report offers a valuable example to many older communities. It is, in fact, a bundle of sanitary tracts, by different members of the Board and experts, the first of which is on "diphtheria in its relation to filth causes;" the second on "the prevention of typhoid fever," followed by others on "land drainage and the obstruction of water-courses;" on "preventable causes of insanity;" "watersupply of the State, and the investigation of the drinking-water of a city;" on "school buildings;" and even on "the influence of reading upon health." In addition, we have seen a popular circular, entitled "Suggestions for the Restriction and Prevention of Diphtheria," which has been widely distributed.

We have enumerated the contents of this volume because it illustrates the direction in which, as it appears to us, the earlier efforts of our infant State Boards of Health can profitably be engaged. The publication of a volume of vital statistics carefully drawn up and trustworthy, while it may be valuable to the professional sanitarian, is not apt to be appreciated by the public at large. But articles of a popular

character on sanitary subjects widely circulated, and coming with the authority of a public Health Board, cannot fail to produce an effect on the minds of the people at large, and must gradually educate a constituency prepared to support further and higher measures for the public health.

We trust the day is not far distant when this State shall also be provided with a Board of Health, whose duties may well begin by the issue of popular health-tracts, such as these of the Wisconsin Board, for the instruction and enlightenment of the general public.

#### "UNDER THE WEATHER."

THE influence of temperature upon the causation of disease is well known; that of barometric pressure, although but little studied, has been conclusively shown within certain limits. But the power for good or evil which the general condition of the atmosphere exerts, temperature, pressure, moisture, and ozone being collectively considered, has never been fully examined into. Dr. Mitchell's recent researches upon the influence of the weather in certain nervous affections is a step in the right direction, to be followed, it may be hoped, by a general study of these points. But, although no scientific foundation has as yet been reached upon which intelligent conclusions can be based, yet it may be hoped that further observation will reveal some practical facts which can be made use of in the amelioration of disease, and for the general well-being of the community.

Take, for example, the unhappy "dog-days," which have raged, in many parts of the country, with unwonted severity recently. Here we have a uniform, not very high, temperature of perhaps 75° to 85° F., varying comparatively little between day and night, or one day with another, during a couple of weeks, the sky overclouded, preventing radiation, the

atmosphere loaded with a more than common amount of moisture, and the barometer indicating a pretty uniform low press-Under such meteorological conditions, all, especially the dwellers in cities, suffer more or less. The perspiration brought freely to the surface on the least exertion fails to evaporate into the moisture-laden air, and clings clammily to the skin, preventing a due reduction in temperature. The stagnant air fails to remove foul odors, which seem to acquire a double intensity, or to bring fresh oxygen from the open fields and forests. The exhaustion of the previous heated term prevents due resistance to these influences, and it · is a sturdy constitution alone which can pass through the ordeal without sensible depression and loss of vitality.

The idea that some means might be found of combating these influences with success may, in the present state of our knowledge, seem chimerical, but it is, nevertheless, worthy of the attempt, for the amount of suffering caused by atmospheric conditions other than those dependent upon temperature is worthy of all consideration.

THE publishers desire to notify the public that F. D. Schmidt, who recently canvassed for this journal, is no longer connected with their house in any capacity.

## CORRESPONDENCE.

#### LONDON LETTER.

NE midsummer day, in a rude wind, often coming in heavy blasts, and after drenching rain, a crowd of gentlemen, in overcoats and with umbrellas in hand, could be seen at the Waterloo Terminus of the Southwestern Railway. They were almost exclusively medical men, and many of them are well known over the English-speaking portion of the globe in relation to mental diseases. There was John Charles Bucknill, so well known to all alienist physicians on your side of the water,—tall, erect, stalwart, with his face beaming with good-nature, conspicuous from his

stature; beside him stood his co-editor of the famous manual on "Psychological Medicine," Hack Tuke, a small, slight man; next whom stood Dr. Gray, the Superintendent of the New York State Asylum, a corpulent man, full of vivacity and life,—as are all corpulent men when they are lively. At some little distance stood Crichton Brown, the Lord Chancellor's visitor in lunacy, unique with his long blonde hirsute appendages and pale face; looking very much more like a dandified man about town than anything else, were it not for the broad brow, the keen look about the eyes, and the sparkle of his conversation,—for he is obviously talking, and the knot around him are listening attentively. At some distance stood W. B. Carpenter, the physiologist, and author of "The Principles of Mental Physifurrowed brow of the sage. The centre of another group is W. H. Broadbent, best known as the editor of "Tanner's Medicine," but really an authority on disease of the nervous system, the coming man as a physician; of medium height, with a well-knit figure, well poised, with his hand whether in his trouserspocket or on his hip may not be affirmed. His hat conceals his well-domed head, and his eyes see more than his spectacles will permit them to reveal. There he stands, brimful of good-humor, observing but scarcely conscious of being observed. Not far away is the tall, military-looking figure of Orange, the Super-intendent of the Broadmoor Asylum for Criminal Lunatics, with a grand, dark, scrutinizing eye of inquiring, indeed penetrating, character, telling of his experience and of the material he has to handle. Near him is the slight, nattily-attired Ferrier, with a lean face, and also a very remarkable eye, flicking the ash away from his cigarette, and looking meditatively at it, just as he looked when performing his experiments with their imperishable revelations. Others there were, not alienists, but well known in their own line. Mr. Spencer Wells, the prince of ovariotomists, in the wens, the prince of ovariouslists, in the neatest of garments, with carefully-trimmed whiskers, and gold spectacles on his nose; near him is the asthmatic-looking figure of Graily Hewitt, and cheery Braxton Hicks, all smiles, is not far away. Others there were, less known, but who have planted their foot firmly on the first rung of the ladder of fame. What does this crowd of doctors do there on Saturday afternoon, all bent on something from which the inclement weather does not deter them? The barrier opens, and through stream these worthy members of an honorable profession, seating themselves quickly in the carriages of a special train, which, without delay, steams out of the station along the fertile banks of the Thames. Past the towers of Westminster, the turrets of Lambeth Palace, the grand pavilions of St. Thomas's Hospital, it sweeps; through the apparent mazes of Clapham Junction, bewildering to any but the practised eve of the railway official, it rushes till it reaches the open fields, the foliage on the trees all wet and dripping with the recent rain having such a look of freshness. At some little distance can be seen the pagoda of Kew Gardens. Along the rich warm valley of the Thames, with its almost tropical climate, the doctor-laden train wends its way till Hampton Court is nearly reached: but that is not to be its termination; a little farther and it comes to a standstill. Its freight soon discharge themselves, and in straggling order pick their way down a quiet lane, preserved from being a puddle by the gravelly nature of the soil. The luxuriant foliage lining the lane on either side tells of a high temperature and a balmy atmosphere. These indications are not without their significance. The leaders of the procession turn off at an open gateway in front of a very handsome building, too large, too palatial, to be merely a private residence. The carriage-drive winds through masses of evergreens and clusters of rhododendrons, and leads to the front door of the institution,-The Normansfield Training College for the Feeble in Mind. Dr. Langdon Down is the proprietor of this institution, already well known, but destined ere long to a world-wide reputation. Dr. Down received us all in the Kindersaal, a large play-room underneath the spacious private theatre, where lunch is spread. Dr. Down is a Devonshire man, with the handsome face and figure, the genial kindness and courteous bearing, which characterize the men of South Devon. Indeed, he is one of the handsomest men in the profession. His face is a little flushed, partly with excitement, partly with the physical exertion of shaking hands cordially with his two hundred and odd guests. His features are sharply cut, the nose is certainly aquiline, the brow is lofty and surmounted by a crest of white hair, though the doctor is still a comparatively young man, for his hair paled at an early age. He welcomes us to the inauguration of the new wing and theatre he has just added to his already large block of building in which he received a large party when the British Medical Association held its annual meeting in London in 1873. The building has waxed very perceptibly since then. After a few opening words he leads the way through the new wing. There are in it bedrooms of various sizes, some for one patient, others wards to hold five or six and the ever-present attendant,—for these imbeciles can never safely be left alone. After investigating the dormitories, the system of ventilation, the day-rooms, and glancing at the old building, we return to the new block, wondering and speculating where are all the inmates stowed away. Not a sign or trace is there of the hundred and twenty patients who people these rooms. Arriving at a spacious theatre with the most tasteful of decorations and presenting the most appetizing appearance from the sumptuous luncheon spread in

it, we find, having loitered on the way, the most illustrious of Dr. Down's visitors on the stage or platform. Seated in an arm-chair in front is Courtenaye, Earl of Devon, the representative and head of this illustrious house, the descendant of the rulers of Byzantium, the most prominent of the many conspicuous historical figures of the Crusades. He has left his turreted castle of Powderham, away in sunny Devonshire, to do honor to his fellowcounty-man and preside over the opening ceremony. A quiet elderly man, without anything very characteristic about him except that he is evidently a high-born gentleman. Dr. Down then read an account of how this institution came about. In a few well-chosen sentences he told us how one-and-thirty years ago he was one of a party who were waited upon at dinner in a far-away Devonshire village tavern by an imbecile girl. His com-passion was aroused by her appearance, and there sprang up then what he happily termed "the dream of his life," the strong desire to do something for this unhappy, or rather unfortunate, class. He clung to this craving, and kept the idea steadily before him as the goal of his desires. He worked away and studied carefully the imbecile and the idiot. In time he rose to the position of superintendent of the Earlswood Asylum for Idiots, and finally started his private institution. Eleven years ago, the commencement of the enterprise, the building was a private house in a potato-field. Now it is what they beheld it. The dream of his life was realized, and the most perfect institution for the training of the feeble in mind was his accomplished work, of which he may well be justly proud. The Earl of Devon followed, expressing his great satisfaction with the completeness of the arrangements and the perfection of the whole building, the like of which he said he had not seen anywhere.

We then sat down and devoted a brief period to the claims of the inner man, the rattle of plates and the popping of champagne corks being audible above the buzz of conversation. But this could not go on forever, and in time the best appetite fails, no matter how great the choice and the attractiveness of the viands. Then came the usual toasts and replies, amidst which Dr. Down paid a well-merited compliment to his staff of subordinates and attendants, whose willing, cheerful services have so materially aided him in all his efforts. It was well known to all present that Mrs. Down was—"not his right hand, but both his hands," as he told us in 1873; and when her name was mentioned, it was greeted with repeated rounds of applause of the most enthusiastic

character.

The entertainment was cut prematurely short by the arrival of the hour when the special train must depart on its return journey to London. We were soon all seated in the train, and, as we were whirled back to town,

every one was loud in his approval of the institution and its administration, and wished Dr. and Mrs. Down all success in their commendable enterprise. On dispersing at Waterloo, all felt that we had taken part in a good work which deserves to succeed.

Of course Dr. Down does not provide a sumptuous luncheon and a special train with free passes without a definite consciousness that in doing so he brings his institution under public notice; and so much is there to extol in his enterprise, that I shall devote the rest of my letter to some account of his institution, and of his method of dealing with his

feeble-minded charges.

In the first place, it must be understood that this institution is one devoted to such imbeciles as have friends who can afford to pay for them, and therefore possesses many things which could scarcely be provided in a public institution for pauper imbeciles; but it thereby indicates what ought to be attempted. The necessity for such aggregation of imbeciles is well put in Dr. Down's pamphlet "On the Education and Training of the Feeble in Mind," from which I shall make several quotations. After alluding to the isolated posi-tion of the imbecile at home, gradually ex-cluded from the games of his brothers and sisters, and so his feeble mental workings unencouraged, while he is depressed by the consciousness that he cannot compete with those by whom he is surrounded, Dr. Down writes, "The first thing, therefore, to be done is to rescue the feeble one from his solitary life, to give him the companionship of his peers, to place him in a condition where all the machinery shall move for his benefit, and where he shall be surrounded by influences, where he shall be surrounded by innuences, both of art and nature, calculated to make his life joyous, to arouse his observation, and quicken his power of thought." For this end a combination is required of medical, physical, moral, and intellectual treatment, each aiding and supplementing the other factor. In carrying out such a scheme, the absolute processity for one leading mind to inspire necessity for one leading mind to inspire every subordinate is obvious. As to the medical part of the treatment, it does not merely involve the right and judicious administration of tonics, hæmatics, and other medicines, but includes all hygienic and sanitary arrangements. The necessity for keeping imbeciles in the highest possible attainable health is now generally recognized. If the bodily health becomes impaired, the mental powers wane; and diminution of the intellectual capacity is often the forerunner of serious or even fatal disease. Allusion has been made before to the high temperature of the Thames Valley in its relations to the position of Normansfield. It is now well known that imbeciles do best (to use a horticultural phrase) in a warm place. They largely lose what intellectual power they possess in winter, and, in reality, they go through

a process of hibernation during cold weather. In this they resemble old, worn-out people with a feeble circulation, who are best preserved by keeping them in bed throughout each winter. The mental power of the feeble in mind is always in direct proportion to the external temperatures. Consequently England, with its comparatively mild winter, offers advantages in the training of the feeble in mind over other countries which have se-vere winters. It is found that the brains of the imbecile commonly present an abnormal pallor, telling of defective brain-nutrition; consequently it is of the highest importance to neglect no measure which will tend to develop such brains. Not only is Normansfield placed in the warm Thames Valley, but the placed in the warm Thaines variety, but the temperature in the sleeping-apartments is never allowed to fall below 55° Fahr. even in winter. This causes some difficulties in the way of efficient ventilation, which, however, have been successfully overcome by the architect, Mr. Plumbe. By such means and a liberal dietary, the development of these imperfect beings is assisted. The dietary must be liberal, and be rich in phosphatic and oleaginous elements, as well as in nitrogenized constituents. It should be given in such form as is suited to the masticatory powers of each The rooms for these unfortunates should be lofty and well ventilated, while the use of the bath or the sponge is necessary, both for the welfare of the patients and the comfort of those around them,-for the exhalations from the skins of imbeciles are unpleasant. Then the grounds are well drained. and the walks on the gravelly soil are soon dry after rain, so that plenty of out-door exercise is attained; and exercise of the muscles is very necessary for successful treatment. The Kindersaal under the theatre now supplies ample play-room when the weather is unsuited to out-door play. By exercising the muscles, the intellect is expanded; the bringing of the muscular movements into harmonious relations with the will is an educational course of much value; and the substitution of co-ordinated movements in place of the purposeless rhythmic motions which are common with idiots acts favorably upon the nervecentres, improving their nutrition. The careful building up of the imbecile's brain is thus secured by a most intelligent system. Then, as to the moral training of these

Then, as to the moral training of these imperfect beings. This is carried out by cultivating the affective faculties, which are highly pronounced in this otherwise deficient community. There is no corporal punishment; and the teachers have to study, in every case, the best mode of access to each patient's mind and moral control. Never does any punishment interfere with the hygienic treatment, and especially the food. Dr. Down says, "I have seen a case of violent and uncontrollable temper reduced to calm obedience by the administration of a basin

of bread and milk. The moral delinquency was the result of mental excitement, dependent on defective nutrition." The moral management is sedulously attended to, as is readily evidenced by the bearing and carriage of the staff at Normansfield.

Then, as to the intellectual culture, it is conducted on the basis of the cultivation of the senses. The senses of touch, smell, and taste, as well as those of sight and hearing, are developed as far as possible. The patients are instructed to dress themselves, to comprehend the value and use of money,by means of amateur shopkeeping, where weighing, calculating, and payment go on before the eyes of the patients. The use of the knife and fork, the usages of the table, "to walk with precision, and to handle with tact," as well as correct speech, are all taught assiduously.

To make the patient self-helpful is the object to be aimed at in all instruction of the feeble in mind; mere abstract or memoriter knowledge is of little or no use to these deficient beings. Amusement must be furnished to them of various kinds, and the educational value of theatrical representations has led to the handsome theatre in which we were entertained. Dr. Down concludes, "It will be obvious that the principles which I have indicated can only be effectively carried out in an institution specially devised for the purpose. It will not suffice that the pupil merely attends daily; he must be a member of a community where, night and day, systematic rule and oversight are afforded, where every act becomes the subject of regard, and where the best product may be evolved from the defective materials which are furnished." this end he suggests that counties might combine to procure suitable institutions and suitable superintendents, medical and subordinate, for imbeciles of the lower social order. He truly says, "The whole system must have unity of origin and unity of execution. It should be, as far as possible, the reflex of one mind, and the executive should carry out the purpose of one will."

The success of Normansfield tells of the unity which rules there; and its future will indicate what can be done for the training of the feeble in mind. This pioneer institution carries with it the heartfelt good wishes of all who know it,-the medical profession and the

patients and their friends alike.

J. MILNER FOTHERGILL.

ERGOTIN HYPODERMICS IN EPISTAXIS.-Dr. Porak cites three cases of obstinate nasal hemorrhage, each of which was promptly arrested by a single hypodermic of ergotin. His formula was, Bonjean's ergotin, two grammes; glycerin, thirty grammes. M. Twenty drops hypodermically in the lip or cheek.—La Tribune Médicale.

#### PROCEEDINGS OF SOCIETIES.

PHILADELPHIA COUNTY MEDICAL SO-CIETY.

T a conversational meeting held at the A T a conversational meeting netu at the hall of the College of Physicians, Philadelphia, April 23, 1879, Dr. Henry H. Smith, President of the Society, in the chair, Dr. Albert H. Smith read a paper on "The Hot Douche in Parturition," more particularly in controlling hemorrhage and producing uterine

contractions (see page 541).

The President, Dr. Henry H. Smith, in introducing the subject, spoke of its interest. and quoted two cases in his own practice, one of abortion at the end of the third month, and the other, one of ordinary menorrhagia, where the obstinate bleeding was checked by hotwater injections. He suggested that the rationale of its operation was largely that of constringing the tissues, as in the familiar illustration of the washerwoman's finger. He believed that it would also be useful in ordinary capillary oozing after surgical operations; and in conversation with Prof. Da Costa, he had considered its use as a gargle in hæmoptysis, where it would doubtless act as well as common salt, having the same effect on the terminations of the pneumogastric nerve, and tend to check respiration and allow time for the blood to coagulate.

Dr. O'Hara had used the hot water successfully in a case of menorrhagia after ordinary styptics had failed. He had also used it in bleeding piles, injected as hot as could be borne into the rectum twice daily, and had been surprised at the relief it afforded.

Dr. R. J. Levis said that if heat and not moisture was the active agent in checking the hemorrhage, he would ask the lecturer whether dry heat, such as a hot bottle, or something of this kind, introduced into the uterus, would be

equally effective.
Dr. Charles B. Nancrede, in regard to the use of hot water as a hæmostatic in general oozing, stated that Dr. Charles T. Hunter had recently employed it after amputation to check capillary oozing, with marked success. He had also used it as a gargle for hoarseness after singing, with decided relief.

Dr. John B. Roberts said that hot water had been in use for some time in London, by Mr. Bryant, for the purpose of arresting hemorrhage after operations, and with good results.

Dr. S. D. Risley called attention to the use of hot water in painful affections of the ear, such as furuncle or abscess, where hot injections afford marked relief; dry heat being much less effective.

Dr. W. T. Taylor had always considered hot water as a relaxing agent to the tissues. Nurses used to be in the habit of giving the parturient woman a hot foot-bath and steambath, to relax the uterus in tedious labor. He had always relied upon cold applications and

the use of the hand to produce contractions of the uterine fibres, which had thus far proved successful.

Dr. J. C. Wilson said that, in considering the rationale of the action of the hot water, there had been mentioned in the discussion three points that seemed to bear directly upon its explanation: first, the use of the hot douche as quite effectually controlling uterine hemorrhage, and leading to muscular contraction; secondly, the fact that when a surface is deeply contused and purple with congestion, the hot water will revivify and redden the part, as in the instance of the perineum given by the lecturer; and, thirdly, the shrivelling of the washerwoman's fingers. These seem to suggest that the rationale of the difference between the effects of hot water and that simply warm is, that the former is a decided stimulant, which the latter is not. Looking upon it as a stimulant we can understand its revivifying effect upon the tissues, and upon the capillaries, the shrivelling of the finger being caused by the contraction of the pulp beneath. The advantage of hot water over cold applications is, that the depressing effects of the latter are avoided. It would seem in the discussion that some of the gentlemen had confused the results of the hot douche with those of simply warm injections.

Dr. Risley, in reply to a question, stated that the proper temperature for injection in a case of ear-ache would be about 115°, and believed that under 100° would rather aggravate

the trouble.

Dr. Levis observed that from actual experiment, made some time since, he had found that the face could be immersed in water of the temperature of 118°. The test was made in consequence of a statement of Von Graefe's, that the retina might be depleted by dipping the face in hot water for a few moments. He believed that the face could bear a higher degree of heat than the hands, and probably

the vagina and uterus still higher.

Dr. W. R. D. Blackwood referred to two cases of uterine hemorrhage—one post-partum and the other menorrhagic-which had yielded promptly to hot-water injections. He had very poor results from ice, and believed that Dr. Taylor's success should be attributed to the manipulation rather than to the cold applications. In one of his cases, after the ice had failed he had used the hot douche, and never saw anything act more charmingly or more promptly than these injections; the uterus contracted at once and remained so; there was almost no discharge afterwards. In regard to Dr. Nancrede's statement as to the use of hot water for hoarseness, it was a common expedient among actors, and he knew of its use at the Academy of Music for the last eighteen

Dr. Taylor called the speaker's attention to the fact that he had spoken of cold, but did not speak of ice. He inquired, if the pressure caused the effect rather than the cold, whether, in a parallel case, it might not be the manipulation rather than the hot douche that brought about contraction.

Dr. Blackwood said that in one case he had used nearly half a bushel of ice, packing the uterus time after time, without checking the bleeding. In his last experience with the hot water the uterus had contracted immediately.

Dr. R. Burns, of Frankford, has had some six or seven thousand cases of obstetrics, and has seen a great deal of uterine hemorrhage, and never used one pound of ice nor one pint of water, but always relied upon manipulation, with one hand in the uterus and the other on the abdominal surface. After the high terms in which the article has been spoken of, he felt interested, and would use it if necessary, but saw no reason as yet for adopting any other expedient than the one he had thus far found efficient and always conve-

nient for application.

Prof. R. Beverly Cole, of San Francisco, present by invitation, at the request of the President, gave his views as follows: "I have been not a little interested in the use of hot water in parturition, and in the conclusions of the lecturer, which agree with my own observation and others of equal experience, that hot water is an invaluable agent as a hæmostatic; but my experience also confirms what has been said during the discussion concerning the obtaining of the same effects from cold. The great difficulty seems to be in arriving at an intelligent explanation how hot water acts in producing this effect. It is well that there are a number of surgical gentlemen in the room, who may be able to decide why it is that we obtain the same result from hot and cold applications to wounds. But here is a salient point that may be discussed in connection with the subject of the paper: hot water acts directly upon the nervous elements in the womb, and also upon the middle muscular and elastic coat of the vessels. We know very well that the middle coat has great contractile power, and anything which stimulates this investment of the vessels would cause their contraction and retraction and check hemorrhage. This explains the blanching of the surface that has been referred to. allows of plugging of the orifices of the vessels, so that the bleeding ceases, and produces contraction of the uterus from stimulation of its unstriped muscular fibres.

"I think, however, that the lecturer goes too far when he says that it is the most convenient agent for the purpose, or that it is the most effective in the puerperal chamber. The application of the hand, externally and internally, to stimulate the uterus to contraction is certainly more convenient, and is often as efficient. In urgent cases, the suggestion of Michel, of South Carolina, to compress the aorta just above the origin of the uterine vessels, is very valuable; I have tried it again

and again, and found it effective in every

instance, and easy of application.

"The loss of time in sending for the hot water and in getting the appliances ready must interfere with its use, and in cases of emergency, where the bleeding is profuse, would seriously affect the chances of the patient's recovery. I believe that the pressure of the uterus and moulding with the hand, with compression of the aorta, will generally prove sufficient. During the last twenty years I have not lost a patient from postpartum hemorrhage, and feel perfectly satisfied with the results of manipulation and compression, and think that they will accomplish all that can be obtained by the hot water in producing contraction and checking hemorrhage after parturition, with less disturbance of the patient, and greater convenience to the accoucheur."

Dr. Ulrich, of Chester, by invitation of the Chair, said that this treatment of post-partum hemorrhage was a new one to him, but he believed it to be a valuable one on the statement of Dr. Smith, and in a case of emergency he would be inclined to adopt it. He had not been successful with cold applications, and for many years had relied exclusively upon stimulation of the uterus by the hand; contraction soon takes place, and the hand is forced out, and the hemorrhage ceases. He was unable to understand the rationale of the operation of an agent that relieves a painful affection of the ear and also a relaxed condition of the uterus,-two apparently contrary conditions. In regard to the corrugation of the finger, it is caused by cold as well as by hot water.

Dr. O'Hara thought that the more stimulating effect of hot than warm water might be explained by reflex action, the hot water irritating the nerves of the uterus more than

the warm.

Dr. Albert H. Smith, in referring to the suggestion of the chairman as to the use of hot water in surgery, said that he used it constantly in plastic operations, with the effect of checking oozing of blood. The warm douche relaxes the tissues and favors the pouring out of discharges; the hot application produces contraction and checks the flow of blood.

The use of dry heat, as suggested by Dr. Levis, might be efficient in surgery, but would not be so applicable in the present cases, on account of the impossibility of bringing it in contact with the entire bleeding surface, and, moreover, it has not the advantage of washing away the clots and discharges from the vagina.

The compression of the aorta is a useful auxiliary in desperate cases, but is only temporary in its effects, for the bleeding may recur as soon as the pressure is relieved. The hot douche, on the contrary, produces permanent contraction.

Ice, when introduced into the uterus in

pieces the size of a man's fist, is a valuable agent in treating uterine hemorrhage, but it is liable to produce a depressing effect sub-

sequently.

It has been objected that the length of time required to obtain the hot water and necessary appliances is a drawback to the introduction of the hot douche. On the contrary, it should be looked upon as a necessary part of the armamentarium of the lying-in chamber, and, as such, always provided ready for use. Just as when ergot was used, an obstetrician was considered as neglecting his duty if he attended a case of labor without his ergot, or as where a physician goes a distance from home to attend a case without taking his forceps, so he should be provided with all that is necessary; and the speaker considered that hot water should be kept in readiness on such an occasion, and recommended its use in all cases of labor. The attendant fails in his duty as an obstetrician if he fails to see that everything is prepared; he is bound to be provided against emergencies. and what can be more readily supplied than hot water?

In answer to Dr. Ulrich, as to the use of hot water in inflammation, he stated that its first application in gynæcology was that suggested some years ago, by Dr. Emmett, where he recommended it in the treatment of cervical congestion, for which it is now a standard remedy; used by injection once or twice

daily.

The introduction of the hand, to stimulate the uterus and break up the clots, is a useful and necessary expedient, but an agent that will also wash out the cavity and bring away the clots is much better. Dr. S. had seen the uterus contract under the hot douche with rapidity, safety, and certainty, and better than by any other agent with which he was acquainted. He had also seen its revivifying effects in lacerations of the cervix that he had referred to, and its power over hemorrhage. He thought that it might also be used in checking uterine hemorrhage in cases of malignant disease, or bleeding from any other source in the uterine cavity. If it can check a hemorrhage from laceration of the cervix and its circular artery, it will stop bleeding in malignant disease.

#### PARACENTESIS PERICARDII.

Dr. John B. Roberts read a paper entitled "Is Paracentesis of the Pericardium Justi-

fiable?" (see p. 546).

Dr. William Pepper said that this operation is one of a group which he had always been inclined to claim for medical men rather than surgeons, as the operation itself is a comparatively trifling one, while the questions of the time for the operation and its conditions are of the greatest interest and importance. He agreed with Dr. Roberts in his reply to the caption of the paper, and thought that the

recorded results were sufficient to authorize an affirmative answer to the question.

From observation of post-mortem examinations in which unsuspected pericardial effusions are sometimes found, he had concluded that such large effusions are not infrequent, but that they may be, and doubtless often are, entirely overlooked during life. And yet the physical diagnosis is, as a rule, very simple and easy, the only possible difficulty being in the case of a dilated heart, where there is a feeble, asystolic action of the ven-tricles, accompanied by extended area of dul-ness. That this difficulty exists must be admitted, since cases have been reported in which paracentesis of a dilated heart has been performed under the impression that there was fluid in the pericardial sac, and this in the hands of men whose position is evidence that they were competent to decide. Of course, the case is different where the physician has watched the patient from the beginning, as in a case of acute rheumatism, where frequent examination of the heart is required. In such cases he would detect the early friction in the pericardium before the effusion of fluid in sufficient quantity to sep-arate its layers. The difficulty in diagnosis would only occur where you are called in to see a case that is fully developed; but even then there are points that would generally prevent a mistake: these are the altered intensity of the sounds, the relation of the cardiac impulse to the intercostal spaces, and the outline of the percussion dulness; and it would seem that with due attention to these points no mistake can occur. There are complicated cases, however, where some doubt must remain. In a patient operated upon recently, there was a large pleuritic effusion accompanying one in the pericardium. In such a case he would recommend that the pleural effusion should be removed by the aspirator, and, if necessary, the pericardium can be subsequently tapped. This course can be subsequently tapped. was adopted in the case referred to; and it was found that after removal of the fluid from the pleural cavity, the effusion in the pericardium was absorbed without further interference, under medical treatment.

In regard to the point selected for introducing the needle, he would prefer one that is a little farther from the sternum than Dr. Roberts has recommended, and in the fifth interspace, as being less likely to injure the ventricle; at a site about on a line with the nipple, a little to the outside of the position of

the normal apex beat.

In performing the operation, a moderatelylarge aspirating needle is preferable to a small one, since inflammatory effusion in the pericardium is apt to contain shreds of lymph which would clog a small needle. It is difficult to introduce a plunger to clean a small tube, and they are also less easily reintroduced if it becomes necessary to remove them to clean them. For this particular operation he had devised an instrument which can be used without danger of scratching the heart, but which he had only tried on the cadaver.

In regard to the operation, it has simplicity in its favor. As the results are always brilliant in the marked relief and improvement it affords, and as it frequently prolongs life so as to give time for the action of other remedies, it will compare favorably with any other procedure in the field of legitimate surgical

operations.

Dr. Roberts stated that he had not intended to recommend a very small aspirating needle, but one of moderate size. He would not use a large one, on account of the injury to the pericardium, and the probability of subsequent leakage into the pleural cavity, and possible pleurisy. As regards the shape of the trocar, he believed that Fitch's dome-shaped trocar was less likely to injure the heart.

In regard to the diagnosis, too much stress is laid upon the pyramidal shape of the dulness; the statement in the books is that it is a *rude* triangle, and it might happen that because it was not more perfect some doubt might exist as to the diagnosis.

## REVIEWS AND BOOK NOTICES.

POTT'S DISEASE, ITS PATHOLOGY AND ME-CHANICAL TREATMENT, WITH REMARKS ON ROTARY LATERAL CURVATURE. By New-TON M. SHAFFER, M.D., Surgeon in Charge of the New York Orthopædic Dispensary; Orthopædic Surgeon to St. Luke's Hospital, New York. New York, G. P. Putnam's Sons, 1879. 8vo, cloth, pp. 82.

The conviction is fast dawning upon the minds of many who have followed the prevailing fashion in the treatment of vertebral caries and spinal abscess, that a case of Pott's disease, plus a plaster jacket, is not necessarily equivalent to a cure, nor even to a result that can be considered, with any proper use of language, as at all gratifying to the physician or satisfying to the patient. Cases have been brought to dispensaries, the cuirass carefully applied, and the little sufferer carried away, with the idea that all he has to do is to get well. When the child is brought back, in the course of a few weeks or more, as the case may be, often a very different state of affairs is seen to exist from what had been expected. The plaster has worked loose, and its permanent character has proved a great advantage to several species of vermin, but a corresponding disadvantage to the patient, who, in his efforts to dislodge them, seriously impairs the firmness of the dressing. In the experience of those who are so situated as to see a large number of such cases, it is not rare to have a child brought back with the report that the reason for the delay was the fact that

the patient had an attack of measles, chickenpox, or scarlet-fever, in which case it is seen that the plaster bandage, by covering a large area of the body, might prove a source of increased danger to the patient. It was the fortune of the reviewer to witness a somewhat similar scene, though with a different form of fixed dressing. A child had been put in the "wire breeches" for hip-disease. The mother did not return at the specified time, nor for several weeks after. At the time of her reappearance she explained that the child had suffered from whooping-cough and measles, and she had been unable to bring him until then. The original bandages had not been disturbed, and of course the boy had not been washed during all this period. When the dressings were removed, it was seen that the child's elastic garters, which held up his little woollen stockings, had not been removed at the time of the original dressing and were now deeply imbedded in the swollen tissues. Fortunately they had not exerted enough force to produce ulceration or gangrene. It is needless to stop to comment upon the increased risk to the patient who passes through an exanthem tightly encased in an immovable bandage. This is only mentioned, however, as a possible incidental result, and it is acknowledged that it is scarcely a legitimate objection to this specific plan of treatment. More pertinent objections to the plaster jacket are, as stated by Dr. Shaffer,-

"I. Its great weight, and the necessary oc-

clusion of so large an area of skin.

"2. The great danger of excoriations, which may develop at any time and remain hidden for days or weeks.

"3. The absolute necessity of suspension each time the curvature is inspected or the

patient cleansed.

"4. Its great filth; and, lastly, its failure to accomplish, in the great majority of cases, the objects for which it is applied."

He would not, however, discard the plaster bandage entirely, but would restrict it to selected cases. In others he prefers a form of antero-posterior support which embodies the principles of the "Taylor's Spinal Assistant"

or the "Davis Spinal Brace.

Clinical experience has taught Dr. Shaffer to divide the vertebral column into three regions, so far as the mechanical treatment of spinal caries is concerned. "The first region includes the lumbar and last five dorsal; the second comprises the first to the seventh dorsal, -both inclusive; and the third includes all the vertebræ above the first dorsal." The plaster jacket of Dr. Bryan, popularized by Dr. Sayre, he considers only available for those cases where the lesion is below the seventh dorsal vertebra.

The views of Dr. Shaffer on pathology are more in accord with those of Professor Gross than of Professor Sayre, as he rejects the traumatic in favor of the constitutional origin of Pott's disease. The remarks on treatment are practical, and carry with them the evidence that they are based on abundant experience and careful observation. After reading it, the conclusion is unavoidable that no one who may be called upon to treat cases of this kind can afford to be unacquainted with the truths set forth in this little monograph, in writing which Dr. Shaffer has rendered a real service to the profession.

Essays in Surgical Anatomy and Surgery. By John A. Wyeth, M.D. (University of Louisville). Wm. Wood & Co., New York, 1870.

This volume of some two hundred and sixty odd pages comprises four essays,-two devoted to the surgical anatomy and the history of the larger arteries of the neck, and one of the remaining two to the surgical anatomy of the tibio-tarsal region; the other to the anatomy of the obturator artery.

first three are prize essays.

Dr. Wyeth evidently has given considerable attention to surgical dissections, for his observations on the anatomy of the various regions considered in these essays display a familiarity with regional anatomy that cannot be obtained from text-books alone. A large portion of the first two essays consists of very full statistics of cases of ligation of the innominate, subclavian, and carotid arteries, with conveniently arranged summaries of the various operations.

In the essay on the anatomy of the tibiotarsal region, the arterial distribution is considered, with a view of determining what should be the extent of the inferior or calcanean flap of a Syme or Pirogoff amputation. The last essay treats of the origin and important surgical relations of the obturator artery.

This work deserves to take high rank among works of reference, on account of the carefully-prepared statistical tables that it contains. Then the many new points in topographical anatomy brought out by the author make the work of equal value to the practical surgeon.

PARESIS OF THE SYMPATHETIC CENTRES from Over-Excitation by High Solar Heat, long continued and suddenly withdrawn, etc. So-CALLED MALARIA: its Etiology, Pathogenesis, Pathology, and Treatment. By CHARLES T. REBER, M.D. St. Louis, Geo. O. Rumbold & Co., 1879. 12mo, pp. 112.

Dr. Reber suggests that the term malaria should be discarded, and that we should adopt in its place the term *hypertherma*, or excessive heat. "For," he says, "it is quite evident that the air, per se, has nothing to do with the production of the diseases now known as the malarial diseases. . . . The proper name for these diseases, based on pathological lesion, would be paresis of the temperature or sympathetic centres." Want of space forbids our entering into the arguments brought forward by Dr. Reber in support of these views, but we may recommend that this book be read and pondered by those interested in the subject of which it treats.

A TEXT-BOOK OF PHYSIOLOGY. By J. FULTON, M.D., etc., Professor of Physiology and Sanitary Science in Trinity Medical College, Toronto. Second Edition, revised and enlarged, with Numerous Illustrations. Philadelphia, Lindsay & Blakiston; Toronto, Willing & Williamson, 1879. Octavo, pp. 416.

Prof. Fulton's book is intended chiefly for the medical student, and does not enter into the profounder regions of the subject of physiology. It is, however, up to the level of our present knowledge in most respects, and, being prefixed by a histological part, covers very satisfactorily the ground usually gone over in a medical course. The illustrations are mostly borrowed from various well-known text-books. Without being new or striking, they are sufficient, and the work appears to be well calculated as a text-book.

On Diseases of the Stomach, the Varieties of Dyspepsia, their Diagnosis and Treatment. By S. O. Habershon, M.D. London, etc. Third Edition. Philadelphia, Lindsay & Blakiston, 1879. Octavo, pp. 324.

The key-note to this book is found in the statement of the preface as to the importance of endeavoring to cure the patient, rather than merely seeking to treat the disease. The varieties of dyspepsia are described in their relation to the body at large, and the methods of treatment are pointed out in a way to make the book practically useful to the working physician.

CLINICAL LECTURES ON STRICTURE OF THE URETHRA AND OTHER DISORDERS OF THE URINARY ORGANS. By REGINALD HARRISON, F.R.C.S., Surgeon to the Liverpool Royal Infirmary, etc. J. & A. Churchill, London, 1878.

This small volume consists of a series of eighteen clinical lectures delivered by the author at the Liverpool Royal Infirmary. The greater portion of the work is devoted to the consideration of organic stricture of the urethra and the complications that are liable to attend this exceedingly troublesome affection. In the treatment of stricture, Mr. Harrison gives decided preference to gradual dilatation over all other methods in vogue at the present time.

The lectures on Hypertrophy of the Prostate, Cystitis, Calculous Disorders, and Tumors of the Bladder and Prostate contain many practical suggestions concerning the diagnosis and management of these intractable disorders, which will be of great value to the

busy practitioner who has little time to consult systematic treatises on these subjects.

## GLEANINGS FROM EXCHANGES.

TREATMENT OF LUMBAGO.—The best treatment in acute lumbago, at first, is the application of cut-cups to the muscle or muscles affected, to be followed immediately by narcotic fomentations, in the shape of a bag of hops soaked in hot water, hot vinegar, or alcohol, and applied directly over the scarified There are various stimulating and anodyne liniments which may also be used, as turpentine, ammonia, and camphor. Opium in the form of a ten-grain Dover's powder, given early, relieves pain and produces diaphoresis. Atropia hypodermically (one-eightieth grain) is valuable, but must not be given to nursing women. Morphia may also be given hypodermically (except in pregnancy), and these two remedies are usually the best in private practice when cut-cups cannot be used. Iodide of potassium, in doses of five to ten grains every three hours, gives very good results. Chronic lumbago is very stubborn. The most useful class of remedies are blisters, sinapisms, the actual cautery, etc. Local friction and *massage* conscientiously applied are often useful when counterirritants fail. Tepid water may be applied, either in the shape of wet compresses kept in constant contact with the part, or in the form of a douche falling steadily upon the rheumatic muscles for some time from a height of eight to ten feet. The action of water, though slow, is a very permanent one. After the treatment by douche or by wet compresses, the parts should be briskly rubbed with a coarse cloth or a skin brush, and then covered with cotton or wool or a piece of india-rubber The use of a metallic brush is sometimes advantageous, and finally tying a cloth over the lumbar regions and ironing them thoroughly two or three times every day, following this up with the application of some stimulating liniment, is often to be advised.— Hosp. Gazette and Archives of Clin. Surgery.

AURINE THERMOMETER FOR GYNECOLOGICAL PRACTICE.—Dr. Otto Küstner, of Jena, describes an ingeniously arranged instrument composed of a silver female catheter which contains in its lumen a self-registering thermometer. The catheter tapers sharply below the point to which the bulb of the thermometer reaches, and the instrument is so arranged that the thermometer can be removed if desired. The urine in passing out bathes the thermometer, and only fifteen seconds are required to bring the temperature up to the maximum, which is the same as that in the axilla, or within a fraction of it (0.3°-0.5° C. higher).—N. Y. Med. Record, 1879, p. 466;

from Cbl. f. Gynäkol.

Poisoning by Muscles.—One evening at tea-time Dr. O. Brunn partook, with a friend (who was not affected by the food), of some fresh boiled muscles,-which he had often eaten before with impunity. He had during the night itching of the wrists and neck, cardialgia, etc. The body became covered with urticaria, and there were noises in the ears and scintillations in the eyes, with occasional diplopia. An emetic of ipecacuanha and tartarated antimony caused the expulsion of muscles and mucus. There were also twitchings in the anterior portions of the thighs, relieved by chloral, which produced some sleep, during which the muscles continued to twitch. There was severe pain in the legs and back, and motion was much impaired. All these and similar symptoms, which lasted eight or ten months, Dr. Brunn attributes to the muscles. The treatment consisted in the application of leeches to the lumbar region and ice-bags to the spine, the occasional administration of morphia and chloral, and the use of iodide of potassium, and iron, together with the constant current along the spine.—Brit. Med. Four., 1879, p. 791; from Hospitalstidende.
TETANUS AND THE SMOKING OF CANNABIS

TETANUS AND THE SMOKING OF CANNABIS INDICA.—At a recent meeting of the Medico-Chirurgical Society of Edinburgh, a paper by Dr. Lucas was read referring to certain cases of tetanus which had come under his care. One of these, apparently idiopathic, was cured by smoking cannabis indica. Twenty-five grains of the leaves of the Indian hemp was mixed with three or four times its bulk of tobacco, and smoked from a hookah whenever a fit threatened, and continued until the patient became drowsy.—Edinburgh Med. Your.

May, 1879.

CONGELATION AND FLUID PRESSURE IN THE TREATMENT OF CANCER.—Dr. Jas. Arnott, in a series of papers on this subject, says that four local remedies are employed in the treatment of external cancer: excision, cauterization, pressure, and cold. The removal of cancerous growths from the breast by caustic is much safer than that by the knife. great objection is the severe and long-continued pain; but this can be obviated by congealing the part previously. By freezing a tumor an hour before applying chloride of zinc, the benumbing is so complete and lasting as to prevent pain during the whole time required by repeated cauterization for its removal. As to compression, Dr. Neill Arnott employed a spring and a slack cushion of air. The effect of this apparatus was the total removal of the morbid production in the most favorable cases, and in others the gradual reduction of bulky masses to small, hard, flat patches, or rounded nodules, which appeared to be, both locally and generally, completely innocuous. With such good results it is surprising that this treatment has not been more generally used; but it sometimes gives rise to

pain, especially if the morbid part is heated by the cushion. It is here, therefore, that cold comes into play; and this may be used either alone or in connection with pressure. Dr. Arnott suggests irrigating streams of cold water flowing into the cavities of the body, or double cups, etc., for the application of ice to the outer surface. He thinks that moderate cold and pressure combined offer a mode of treatment in cancers which has not been used so much as it deserves.—Med. Times and Gazette, May 17, 1879.

Gazette, May 17, 1879.

RUPTURED PERICARDIUM AND DIAPHRAGM.

—At a recent meeting of the Boston Society for Medical Observation, Dr. Draper showed a specimen of ruptured pericardium and diaphragm, and gave the following account of

he case:

B. McD., 38 years old, a vigorous Irish laborer, was standing upon a low platform at the edge of a sewer excavation, when a cart was carelessly backed against the stage, throwing it and its occupant into the cut, a fall of twenty feet. The injured man was rescued after some delay, and died in twenty minutes from the time of the fall, having continued in an insensible condition from the outset. At the autopsy, nineteen hours post mortem, the only external signs of violence were some superficial abrasions of the forehead and face, with two small bruises at either side of the sternum, close under the clavicles. After removal of the sternum and costal cartilages a distention of the pericardium was noticed; incision of this part exposed a great quantity of clotted and fluid blood filling the cavity. Four fluidounces of bloody serum were removed, leaving coagula in masses entangled in the old adhesions of the heart and pericardium. In the parietal portion of the pericardium, beginning just behind the apex of the heart and passing downward and to the right a distance of four inches, was a laceration involving the pericardium and the upper muscular layers of the subjacent diaphragm. The interventricular septum was also ruptured transversely. liver showed four small superficial lacerations on the inferior surface of its right lobe. The right kidney presented five superficial tears, half an inch long, near the hilus on the anterior surface. This organ lay in a mass of fat which was much bruised and infiltrated with extravasated blood. The sternum was fractured through the centre of its body. The fifth and sixth ribs on the left side were broken just outside the nipple-line. The left tibia and fibula were fractured transversely at their middle.—Boston Med. and Surg. Four., June 5,

CROTON CHLORAL.—Dr. Herbert Snow, writing to the *British Medical Journal*, says that this drug is readily soluble in warm water with a little shaking. He has found it invariably successful in toothache, provided only that no suppuration had begun

to take place. Five grains every three hours is the dose he usually employs. In neuralgia of the head and face this remedy is very useful: but where the trunk and limbs are attacked it is valueless,-large and frequent doses of quinine being then indicated.

HÆMATEMESIS IN THE NEWLY-BORN CHILD. -Dr. John A. Erskine Stuart says that the causes of this rare affection are variously stated to be obstruction to the portal, pulmonary, or cardiac circulation, or a deficiency in the nutrition and elasticity of the cardiac walls, evidenced by the coexistence of a hemorrhagic diathesis, either hereditary or not. Tedious labor, with compression of the child's head or the difficult establishment of respiration, has at times appeared to be an exciting cause. Dr. Stuart gives a case in which there seemed to have been a tendency to the hemorrhagic diathesis in the mother. labor was easy, the child being small. It was well for twenty-four hours; then attacked with vomiting of blood, which lasted a day or two and then ceased spontaneously. Blood was also passed by the bowels. No treatment was adopted. The child lived.—Edinburgh Medical Fournal, June, 1879.

PREVENTION OF MAMMARY ABSCESS. -Dr. Jamieson says that distention of the milkducts, from inflammation due to cold caught in early lactation; imperfect formation of the nipple; fissured nipples or localized hyper-æmias, from constant suckling, in anæmic and feeble persons, are the usual causes of mammary abscess. He urges the use of lowcut corsets; wide, easy dresses; attention to drawing out and developing the nipples from the beginning of conception, in addition to the usual means in use after delivery. -Edinburgh Medical Journal, June, 1879.

## MISCELLANY.

THE AUTOPSY OF THE LATE CHARLES A. FECHTER.—We have been favored with an account of the autopsy of Fechter, the actor, who died on the 11th instant. The examination was made by Prof. William H. Pancoast, assisted by Drs. Shoemaker and McConnell. The chief seat of disease lay in the liver and spleen; the former, which was in a cirrhosed condition, was much enlarged, weighing nine and one-eighth pounds. The spleen was also enlarged, weighing fifteen ounces. The kidneys also were somewhat enlarged. There was about half a gallon of fluid in the peritoneal cavity. The intestines were greatly distended. The heart was somewhat enlarged and flabby. Examination of the brain showed evidences of arachnitis. The encephalon weighed forty-two ounces, and was firm. No signs of cerebral inflammation or softening could be perceived. The immediate cause of death appeared to have been interference with cardiac action from excessive tympanites.

## NOTES AND QUERIES.

#### A CORRECTION.

A CORRECTION.

Our attention has been called by several correspondents to the fact that a brief abstract in the Times for June 21, from a German journal, credits that source with the article of Dr. Weber on "Belladonna in Collapse," which, in reality, appeared in our own columns a little over a year and a half ago. We regret the inadvertence which caused this mishap. We can bear with fortitude the appropriation of our best things by others without acknowledgment, but when we find ourselves stealing our own thunder and crediting it to some one else, we are, naturally enough, indignant.

#### OBITUARY.

AT a special meeting of the West Philadelphia Medical Book Club, called to take action on the death of Dr. Benjamin B. Yocum, the following resolutions were adopted: WHEREAS, Information having been received that Dr. Benjamin B. Yocum, after a short illness, has been removed from

jamin B. Yocum, after a short illness, has been removed from our midst by death, therefore Be ti resolved, by the West Philadelphia Medical Book Club, in special meeting assembled, that in the demise of our fellow-practitioner—one so young and full of promise—we deeply mourn the loss of a gentleman who brought with him, in the performance of the responsible duties of the physician, a high degree of intelligence, courtesy, and kindness, ever actuated by a lofty sense of honor in his relations to the profession, and a spirit of charity and solicitude for those submitted to his professional care;

Resolved, That we deeply sympathize with the bereaved family, and tender our condolence in this sad hour, trusting that He who brings even bereavement "doeth all things well!"

Resolved. That a copy of these proceedings be transmitted

well:"

Resolved, That a copy of these proceedings be transmitted to the family of deceased, that a minute be made of them in the journal of the Club, and that they be published in the Philadelphia Medical Times and daily papers.

Thos. A. Downs,
W. C. BARRETT,
B. L. RAY,
HEXT. M. PERRY,
S. S. STRYKER,

Committee.

#### OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY FROM JULY 27 TO AUGUST 9, 1879.

WEBSTER, WARREN, MAJOR AND SURGEON.—Granted leave of absence for three months, S. O. 181, A. G. O., August 5, 1879.

CORSON, J. K., CAPTAIN AND ASSISTANT-SURGEON.— Leave of absence extended one month, with permission to go beyond the limits of this Division. S. O. 84, Di-vision of the Pacific and Department of California, July 21, 1879.

HARVEY, P. F., CAPTAIN AND ASSISTANT-SURGEON.— Relieved from duty at Fort Buford, and assigned to duty at Fort Randall, D. T., relieving Assistant-Surgeon Crampton. S. O. 84, Department of Dakota, August 2,

MMPTON, L. W., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—When relieved at Fort Randall, to proceed to Fort Buford, D. T., and report to the Post-Com-mander for duty at that Post. S. O. 84, c. s., Depart-CRAMPTON, ment of Dakota

KANE, J. J., FIRST-LIBUTENANT AND ASSISTANT-SURGEON.

—Having reported in person at these Headquarters, to proceed to Santa Fé, New Mexico, and report to the Commanding Officer, District of New Mexico, for assignment to duty. S. O. 144, Department of the Miscovicial Pages 2015. souri, July 26, 1879.

Brewster, WM. B., First-Lieutenant and Assistant-Surgeon.—Now at Fort Omaha, Nebraska, to report in person to the Commanding Officer, Fort Robinson, Nebraska, for duty. S. O. 64, Department of the Platte, July 26, 1879.

Appel., A. H., First-Lieutenant and Assistant-Surgeon.

—Having reported in person at these Headquarters, ordered to repair to Fort Peck, and report thence by letter to Col. N. A. Miles, Fifth Infantry, for duty.

S. O. 81, Department of Dakota, July 24, 1879.

RICHARD, CHARLES, FIRST-LIEUTENANT AND ASSISTANT-SURGEON.— Having reported at these Headquarters, assigned to temporary duty at Fort Buford, D. T. S. O. 83, Department of Dakota, July 30, 1879.

## PHILADELPHIA MEDICAL TIMES

PHILADELPHIA, AUGUST 30, 1879.

#### ORIGINAL COMMUNICATIONS.

OPTIC NEURITIS AS A SYMPTOM OF INTRACRANIAL DISEASE.

BY WILLIAM F. NORRIS, M.D.

Read at the Meeting of the Pathological Society, April 24,

THAT certain forms of blindness and impaired vision are frequent accompaniments and results of cerebral disease is a fact which has been recognized in all ages in every country where there has been even a rudimentary development of anatomy. We find this clearly stated by the Hindoos and Egyptians, and still more plainly by the Greeks and Romans.

Although very interesting, such observations lose much of their value to us of the present day, for the reason that the knowledge of anatomy and physiology possessed by the writers was so imperfect that it is impossible for us, from their description, always to separate the amblyopia produced by local changes of the retina or choroid. or by paralysis of the ciliary muscle or partial opacity of the media of the eye, from that produced by disease of the brain centres or optic nerves.

Türck,\* of Vienna, however, in 1853, awakened renewed interest in the subject, by describing retinal hemorrhages, which he attributed to increased pressure in the venous sinuses of the dura mater; and, in 1860, Graefet wrote a paper, in which he not only called attention to the frequency of inflammation of the optic nerve in cases of cerebral disease, but described two varieties of it, - one accompanied by intense swelling of the intraocular end of the nerve, which he designated as stasis papillæ, and the other as neuritis descen-He based these distinctions on four cases of choked disk, in two of which autopsies had been made respectively by Virchow and by Schweigger. In both of these there was sarcoma of the right hemisphere, with inflammation of both optic nerves, and the changes were mainly limited to their intraocular ends. He relates, also, other cases where there was marked inflammation of the optic nerves, with less swelling of the intraocular ends, and in which, although there was no autopsy, the symptoms pointed to meningitis, and in these he supposed there was probably a descending neuritis.

Five years later we find him, † in another paper, still further elucidating this theme and detailing another case of brain-tumor. in which there was a choked disk on one side only, and also three cases of inflammation of the nerves, in which the autopsies showed that the interstitial neuritis

extended throughout the nerve.

The types thus recognized and described by Von Graefe are now universally recognized, although, as he himself pointed out. it is not possible, in all stages of the affection, to distinguish between them with the ophthalmoscope. The choked disk shades off into the more ordinary form of neuro-retinitis; this again into the stage of atrophy so gradually that in describing a case it is often difficult accurately to classify the appearances presented by the intraocular end of the nerve.

Since that date both the journals devoted to ophthalmology, as well as those of general medicine, teem with cases more or less accurately reported. It is, however, not my intention to give an analysis of them, but, after calling your attention to the statistics showing the frequency of their occurrence, to demonstrate to you on the screen, by means of the gas lantern, the various stages of neuro-retinitis, and the anatomical changes found in the tissues involved. As regards the frequency with which optic neuritis occurs in cases of brain-tumor, there has been considerable difference of opinion. Thus, as late as 1868, at the Heidelberg Congress, Becker gave it as his opinion "that brain-tumors frequently occur without any swelling of the disks," and Schweigger, in his Handbook, in 1871, says "that choked disks are absent in the majority of cases of brain-tumor."

More recent statistics, however, prove the contrary. I will only cite here those of Annuske§ and of Reich, || and will regard among these only those cases where there was an ophthalmoscopic examination during life; of such cases the former gives forty-three and the latter forty-five, making a total of eighty-eight cases. Of these, in

<sup>\*</sup> Zeitschrift der Gesellschaft der Wiener Aerzte, 1853; 186d., 1852 and 1855. † Archiv f. Ophthalmologie, vii. 2.

<sup>‡</sup> Archiv f. Ophthalmologie, xii. 2. Ž Archiv f. Ophthalmologie, xix. 3. ¶ Klinische Monatsblätter f. Augenheilkunde, vol. xii.

eighty-two cases (i.e., ninety-three per cent. of them) there was double optic neuritis. Basilar meningitis, especially the basilar meningitis of tuberculous children, is probably the next most frequent cause of optic neuritis. Thus, Heinzel\* gives thirty-three cases of basilar meningitis in children, of which twenty-seven (eighty-one per cent.) showed either neuritis or consecutive atrophy. Allbutt† gives thirty-eight cases of basilar meningitis, out of which twenty-nine (or seventy-six per cent.) showed changes in the optic disks.

We thus see that double optic neuritis becomes a valuable symptom of braintumor and basilar meningitis. Such cases, of course, usually end fatally from the natural progress of the malady causing them; but I have seen occasional cases of basilar meningitis in children, where they had escaped with partial or complete atrophy of the optic nerve, and, in adults, cases of syphilitic gumma within the cranium, and of cerebro-spinal meningitis, where there was marked optic neuritis, and recovery with partial atrophy of the disks. lieve that the number of such cases in which double optic neuritis occurs is usually much under-estimated, simply because it is not carefully looked for, many thinking it not worth while to examine the eyeground unless there is marked failure of vision. I have followed a case for months where there was marked choking of the disks, and in which vision remained good (20); and Mauthner† cites a case where the patient, to the day of his death, retained perfect central vision  $(\frac{20}{xx})$ . ophthalmoscope should therefore be used in every case of suspected brain-tumor. whether there be failure of sight or not. The lecturer here showed on the screen four cases of various grades of neuro-retinitis,—one a choked disk intensely swollen full of small tortuous blood-vessels, with a few small hemorrhages in its superficial layers; one showing the same affection in a less degree; and two of descending neuritis, from cases of meningitis.]

To explain the connection between the intracranial affection and that of the distal end of the optic nerves, physicians have had recourse to various theories. of these deserve our careful attention,viz., I. the back-water theory; II. the

vaso-motor theory; III, the lymph-space

Von Graefe, who supported the first, supposed that increased intracranial pressure caused a back-water movement of the blood in the venous sinuses of the dura mater. which was transmitted thence by the ophthalmic to the central retinal veins, the lamina cribrosa acting as a multiplier, and increasing, by its constriction of the vessels, the cedema and congestion of the intraocular end of the nerve. The anatomical investigations of Sesemann§ have since shown that the anastomoses between the ophthalmic, orbital, and facial veins are so free that it is not at all probable that intracranial pressure can thus be transmitted through the veins to the eye-ground. Moreover, Michel has recently shown (by autopsies of seven cases) that complete stoppage of the return blood by the vena centralis retinæ (by thrombosis) may occur, and, although giving rise to blindness and numerous hemorrhages in the retina. does not cause swelling of the intraocular end of the nerve.

II. The Vaso-Motor Theory.—Benedict¶ has attempted an ingenious explanation, to the effect that the engorgement and swelling of the disk are caused by a local palsy of the sympathetic; but it is scarcely possible that this palsy should be always limited to the few filaments supplying the intraocular end of the nerve, and that symptoms of paresis of the other branches -such as contraction of the pupil, partial ptosis, flushing of the face, which are notoriously absent in such cases—should not

frequently occur.

III. The Lymph-Space Theory. - Since Schwalbe, and Axel Key, and Retzius have added so much to our knowledge of the lymph channels of the cerebro-spinal system, and it has been known that the lymph spaces between the dural and pial sheaths of the optic nerves communicate freely with the corresponding lymph spaces in the cranium, the attention of physicians has been directed to the possibility of increased quantities of intracranial fluids (lymph, blood, pus) being forced into the space between the nerve-sheaths, and thus causing a dropsy of the peripheral end of the nerve, obstruction to its blood-circulation, and alterations in its nutrition.

<sup>\*</sup> Jahrbuch der Kinderheilkunde, vol. viii. † Use of the Ophthalmoscope, 1871. † Lehrbuch der Ophthalmoscopie, Wien, 18**6**8

Reichert's Archiv f. Anat. u. Physiol., 1869.
Archiv f. Ophthalmologie, xxiv. 2.
Benedict, Electrotherapie, Wien, 1868.

According to this theory, owing to increased intracranial pressure, partial stasis occurs in the veins, with exudation of the watery parts of the blood into the subdural and sub-arachnoid cavities, and this fluid, seeking the point of least resistance, finds its way into the lymph space between the outer and inner sheaths of the optic nerves, and, by gradual pressure, causes a dilatation of the peripheral end of the dural sheath just before it passes into the sclerotic, compressing, at the same time, the pial sheath and the nerve-fibres covered by it. Moreover, experiments on animals show that increase of fluid in the sub-arachnoid space really acts in this way. Thus, Manz\* has shown that two cubic centimetres of water, or water colored by Berlin blue, when injected into the sub-arachnoid cranial space of rabbits, causes a distention of the sub-vaginal space of the optic nerves, swelling of the optic disks. tortuosity and enlargement of the retinal veins, and, later, a diminution in the size of the arteries. Schmidt, in the calf, proved that such injections filled not only the sub-vaginal space, but also the lamina cribrosa, and distributed itself, to a limited extent, around the individual bundles of nerve-fibres.

In 1873 and 1874 I was much interested in this subject, and made several attempts to inject the sub-vaginal space of the optic nerves from the cranial cavity. The subjects on which I succeeded best were young children, in which I injected from the lower lateral corner of the anterior fontanelle. In several cases I not only succeeded in filling completely the sub-vaginal space, but also in partially filling the lamina cribrosa and the spaces around the smaller bundles of nerve-fibres. This injection of the spaces round the nerve-fibre bundles I found only at the peripheral end of the nerve. It appeared to enter the lymphsheath of the central vessels, and follow this in its ramifications between the bundles of nerve-fibres (for the central retinal artery and vein give off many branches to that portion of the nerve through which they pass). This distribution of lymph would also account for the great swelling of the distal end of the nerve in cases of choked disk. My injections filled also the lymph spaces of the spinal cord and of the nerves given off by it, and in a few, with high pressure, it penetrated from the sub-dural to the perichoroidal space.

I will now project upon the screen careful drawings from a case of choked disks, which came under my notice in 1873,† where the autopsy showed a sarcomatous tumor of the cerebellum, abundant serous fluid in the sub-arachnoid space of the brain and spinal cord, pear-shaped dilatation of the outer sheath of the optic nerve just before it passes into the sclerotic, and markedly swollen disks, which were commencing to undergo atrophy.

These pictures, which show, first, the cerebellar tumor; second, the dilatation of the outer sheath of the nerve; third, sections of the nerve and sheaths: and, fourth, the minute pathological alterations in it (varicose hypertrophy of the individual nerve-fibres, etc.), will probably give you a better idea of the pathological changes than any verbal description. have since seen several other cases of brain-tumor in the practice of my medical friends, where the autopsies showed a like state of affairs, but none in which they were more marked or characteristic. is worthy of note that the size of the tumor seems to have very little to do with the production of choked disk, and very large brain-tumors may exist without it, while very small ones may produce it. long as absorption of normal tissue keeps pace with the development of the new growth we have no choked disk, but when this is not the case the growth acts as an irritant and foreign body, and here we are apt to find choking of the disks. Similar morbid alterations to those above described have been found, both before and since, in many cases of brain-tumor, by other observers, and, while I am far from asserting that this is the only way in which choked disk can be produced by intracranial disease, I do maintain that it is the only method of its production which has been at present demonstrated on the dissecting-table.

Local changes in the sub-vaginal space of the optic nerves may cause, either by direct pressure or by the development of local dropsy, an optic neuritis. Michelt gives a case where obstruction of the optic foramen and closure of the subvaginal space at this point caused a disten-

<sup>†</sup> Transactions of the American Ophthalmological Society, 1874; Cases of Optic Neuritis, by W. F. Norris, M.D. ‡ Michel, Archiv der Heilkunde, 1873.

tion of the distal end of the nerve, by the proliferation of the delicate sub-vaginal tissue (arachnoid tissue); and the same author\* has recently detailed a case caused by the development of tubercle in the distal end of the nerve. An enlargement of the sub-vaginal space at the distal end of the nerve is often caused by the shrinking of the nerve-tissue itself from atrophy, and might possibly, by a careless examiner, be mistaken for enlargement from pressure. [The lecturer here showed pictures of hemorrhage into the sub-vaginal space, of a myxo-fibroma causing a neuritis and dilatation of the sub-vaginal space, and also slides of the minute changes in atrophy and in peri- and interstitial neuritis.]

The doctrine above detailed is accepted by most ophthalmologists of the present day, Loring and Galezowski having been the most prominent opponents of it. former† thought that observers were mistaken in speaking of the dilatation of the sub-vaginal space, and that the pear-shaped dilatation of the end of the nerve was caused by a splitting up of the layers of the dural sheath; and he doubted whether injections into the cranial cavity would really find their way between the sheaths and through the optic foramen. These, however, are mostly mere theoretical objections, and are substantially refuted by the above-detailed experiments and autopsies, and the single post-mortem examination which he adduces is not reported with sufficiently minute detail to prove the points claimed by him.

Galezowski, † in 1872, at the International Ophthalmic Congress, stated that in fifteen autopsies of brain-tumor he had seen only one case of fluid between the sheaths,—an experience which must be regarded as exceptional, in the light of the numerous autopsies made with the opposite results by other observers; and it would be far more satisfactory to those who hold an opposite view if he had stated at what stage of the neuro-retinitis they were examined, and whether the ends of the nerves had been tied before removal, to insure any fluid which was present remaining

in situ.

Moreover, the occasional occurrence of one-sided neuro-retinitis in cases of braintumor remains yet to be satisfactorily ex-

\* Michel, Deutsches Archiv f. Klinische Medicin, 1878. † Amer. Jour. Med. Sci., 1875. ‡ Report of Fourth Internat. Ophthalm. Congress, 1873. plained. I may mention in this connection that, in my injections of the subarachnoid cranial space, I have usually succeeded in filling the sub-vaginal space of the nerve on the opposite side of the head more completely than that on the same side. Whether this was purely the result of accident I cannot positively say; I know of no anatomical arrangement satisfactorily to account for it.

With this I close, in hopes that I have sufficiently interested my fellow-members in the subject to induce them to use their best efforts, by clinical observation and careful autopsies, to elucidate still further this interesting subject, and to help fill out the many gaps which still remain in our

knowledge of it.

A CASE OF NON-PUERPERAL PEL-VIC CELLULITIS IN WHICH THE RESULTING ABSCESS, PERFO-RATING THE INTESTINE AND UTERUS, ESTABLISHED A UTE-RO-INTESTINAL FISTULA.

BY W. T. SKINNER, M.D., of Glasgow, Delaware, and CHARLES M. ELLIS, M.D., of Elkton, Maryland.

RS. THOMPSON, the wife of a farmer, IVI aged 65, and of previous good health, was attacked May 4, 1878, with acute pain, attended with great tenderness, in the right iliac and hypogastric regions. There was moderate fever, temperature 102°, and a pulse ranging from 90 to 112; well-marked tympanites rapidly supervened. The tongue was heavily coated, the bowels constipated, and vomiting was constant. Frequent and painful micturition added to her distressed condition, while the vagina was so tender she could not bear the touch. Under appropriate treatment the tympanites subsided, and a well-defined swelling, tender but without fluctuation, was distinctly felt above the brim of the pelvis, and extending to the median line.

On the 18th of May, pus and fæces were discharged per vaginam, to the relief of the throbbing pain in the pelvis. For a few days the discharge was only occasional, but shortly

became continuous.

On the 22d, the tenderness of the vagina having in a measure subsided, the finger was introduced, and the right iliac fossa was found to be filled by a dense and painful tumor. The uterus was fixed and apparently displaced to the right. Per rectum, the mass descended so low as nearly to obliterate the canal, and the recto-vaginal septum was thickened by inflammatory products.

On the 26th, prolonged nausea and retching was followed by stercoraceous vomiting.

Her condition was now most pitiful and in the highest degree critical. The fæces poured

continuously per vaginam.

On the 28th, after much difficulty, the speculum was cautiously introduced. The vagina was deeply infiltrated and swollen, bathed with pus, and embracing in its folds particles of fecal matter. The uterus, drawn from its central position, projected from the right wall, and the lips of the os, greatly swollen and everted, bled upon slight touch with the sound. No opening could anywhere be discovered in the walls of the vagina. The tenderness of the parts and the critical condition of the patient prevented a more careful examination until June 1. In the mean time, although the nausea had diminished, there was occasional vomiting of fæces, and the feculent and purulent discharge from the vagina was very profuse. On this day the exquisite sensibility of the vagina having in great measure disappeared, the examination of the uterus was very readily accomplished.

Pus still bathed the vagina, and fæces adhered to its walls. The os, more natural in appearance, no longer bled upon touch of the sound. Elevating the anterior lip, pus and fæces gushed from the cavity. For prudential reasons no attempt was made to trace the connections of the fistula. The swelling in the right iliac region had diminished, and small quantities of fecal matter now passed per anum after large warm-water injections.

June 6.—Until to-day her condition has been more comfortable, but this morning she had a return of stercoraceous vomiting. The discharge of pus and fæces per vaginam con-

tinues.

June 10.—The feculent discharge from the vagina has greatly diminished. Solid fæces were passed to-day in large quantities per rectum, and the general condition is very

much improved.

July 15.—Externally the tumor can no longer be distinctly made out, and per rectum it is found much lessened and softer. The vagina is normal in appearance. The uterus is still fixed to the diminished mass on the right, the os red and patulous, with everted and swollen lips. The passage of a small silver probe was followed by the discharge of about half an ounce of pus. Feculent matter has for some time entirely disappeared from the vaginal discharge, and the patient's condition is otherwise much improved. She is now able to leave her bed. A short sponge tent was inserted into the cervix.

During the following night and the morning of the 16th, Mrs. Thompson suffered very much with pelvic pain, which was immediately relieved by the withdrawal of the tent, which was followed by a very copious flow of pus.

From this date her improvement, although slow, was progressive. For several weeks there was a daily discharge of a small quantity of pus, which eventually entirely ceased.

Utero-intestinal fistula is an extremely rare result of pelvic abscess. Simpson refers to one or two cases, Demarquay and Ashwell to one each,—all the result of postpartum causes. Pelvic cellulitis is usually an attendant upon the puerperal state; this patient had not menstruated for twenty years. She, however, makes an interesting statement, to the effect that she had an "abscess of the womb" after one of her confinements.

It was impossible in this case to make

out any causation.

The intestinal opening is, we believe, in most cases into the small intestine, and thence into the rectum. The greenish color and fluid consistence of the discharges, as well as the absence of any marked fetor, clearly determine that this fistula did not open into the rectum.

We believe this to be a unique case of utero-intestinal fistula, the result of non-

puerperal pelvic cellulitis.

THE USE OF HOT WATER FOR RESTRAINING HEMORRHAGE FOLLOWING THE EMPLOYMENT OF ESMARCH'S BANDAGE.

BY PAUL R. BROWN, M.D., Assistant-Surgeon U. S. Army.

HITHERTO one of the most serious objections to the use of Esmarch's tourniquet in surgical operations has been the obstinate capillary hemorrhage which almost invariably begins the instant the tourniquet is removed. Large quantities of blood are very frequently lost, sufficient in some cases to endanger the life of the patient or retard greatly his ultimate recovery. Considerable time is also lost in waiting for the oozing to stop before any dressings can be applied, and great difficulty is often experienced in checking the hemorrhage, so much so that the many advantages resulting from the use of Esmarch's tourniquet in surgical cases are in many instances counterbalanced by this great disadvantage. To check this hemorrhage Esmarch recommends "ice-water applications," the use of "the induced current," "compression of the main artery by means of the fingers," etc. The mere fact that so many different measures are recommended for the purpose of checking this parenchymatous hemorrhage is proof positive that none of them can be depended upon. The perusal of Dr.

Fordyce Barker's article on the treatment of uterine hemorrhage by hot-water injections, and the almost magical effect which attended their use in three severe cases of obstetric hemorrhage treated by myself, led me to believe that possibly hot water might check the capillary oozing following the application of Esmarch's tourniquet. In olden times, before the days of Ambrose Paré, boiling oil was poured upon wounds to restrain hemorrhage, and to-day, water almost boiling is used for the same purpose. I soon had an opportunity to test my hypothesis in a case of amputation of the forearm, in a patient upon whom, three months before, I had performed Lister's operation for the resection of the carpus, on account of necrosis of the bones. disease having returned, an amputation became necessary. Moreover, this patient had a marked hemorrhagic diathesis. march's tourniquet was used in both operations. In the first operation there was an excessively troublesome parenchymatous hemorrhage, which lasted for nearly two In the second operation, as soon as the tourniquet was removed a free capillary oozing commenced. I immediately syringed the parts with hot water, of a temperature of 160° F., and instantaneously checked the hemorrhage, which did not return. That the hot water did no injury to the parts and did not retard the ultimate cure is demonstrated by the fact that in twelve days from the time of operation the parts had completely united and a cicatrix had formed. I have since used hot water several times to restrain hemorrhage from wounds, and always successfully, except where good-sized arterial branches have been divided. The obstinate hemorrhagic oozing following the use of Esmarch's bandage probably results from a temporary paralysis of the vasomotor nerves, which is produced by the The hot pressure of the tense rubber. water acts as a powerful stimulant to these nerves, and they at once produce a contraction of the arterioles, thus stopping the hemorrhage. Water of a temperature less than 150° F. should never be used. Warm "One swalwater is worse than useless. low does not make a summer," but nevertheless I think that this is a valuable surgical expedient, and will, if properly used, tend to popularize that most excellent surgical auxiliary, the Esmarch tourniquet.

FORT BENNETT, DAKOTA, June 15, 1879.

VICARIOUS (?) ENLARGEMENT OF THE PAROTID GLAND.

BY CHAS. P. KNAPP, M.D., Ph.B., Wyoming, Pa.

M ISS M., æt. 20, consulted me in November, 1877. The following is the history of the case:

of the case:

The patient was a blonde, chlorotic and nervous. She showed acne upon the face. She had been in poor health for some time, was weak, easily wearied, appetite poor, menses scanty, light-colored, and attended with pain in the right ovarian region, ceased in a day or two, and were followed by the appearance of a tumor on the right side of the face (parotid region), which increased in size, without causing pain or inconvenience, until the next monthly period, when, upon the ovaries taking on their function, the enlargement quickly subsided. This had occurred for several months previously.

Upon examination, thoracic viscera were found normal, and likewise abdominal and pelvic (so far as examination was allowed), save a slight tenderness in right ovarian region. The parotid gland was enlarged to a noticeable extent, but was painless. The ear and throat, upon examination, showed no-

thing wrong.

The patient was kept under observation for five months, during which time the parotid enlargement was found to subside and recur as above mentioned. She was placed upon tonic treatment, under which she improved in general health, the menses became more free and full, and after the monthly period of May, 1878, the parotid enlargement did not recur, and had not recurred up to January, 1879.

## NOTES OF HOSPITAL PRACTICE.

#### PENNSYLVANIA HOSPITAL.

SESSION OF 1878-79.

SERVICE OF R. J. LEVIS, M.D.
Reported for the Philadelphia Medical Times.

A CASE OF CUT THROAT IN WHICH THE PHAR-YNX WAS ALMOST COMPLETELY DIVIDED.

THIS German, aged 45 years, attempted to commit suicide by cutting his throat, in which attempt he came very near being successful; he also wounded both wrists in his efforts to sever the radial arteries. From the direction of the wounds it is evident that he first felt for the pulse, and then attempted to cut the artery. The wound of the throat is above the larynx, and divides nearly the whole of the lower part of the pharyngeal wall. There remains undivided only a small strip of mucous membrane, about as wide as a finger,

at the posterior part. Neither the carotid nor facial arteries of either side have been cut, but both carotids have been laid bare. By looking into the gash across the throat one can study perfectly the action of the arytenoid cartilages, which are seen moving as the patient attempts to articulate. was a great deal of hemorrhage before his admission to the hospital, and he is now quite bloodless; his pulse is feeble, but not dangerously so at the present time. In fact, he is in greater danger from the secondary effects of the wound than from the loss of blood that he has sustained.

It is remarkable how many attempts at suicide fail, because the patient throws the head back and cuts high up under the jaw. If he would cut just above the sternum, a wound of much less depth would reach the large arteries, and cause death from hemorrhage in a short time; but in the upper part of the cervical region the important vessels lie far back and more laterally. is a popular idea that a person will die of suffocation if the trachea be cut open, whereas it really gives a much greater opening than normal for the passage of air.

The treatment of this exceedingly large wound of the throat will be tentative, as it seems impossible to do anything in the way of suturing the walls of the divided pharynx. He has already been fed with milk by the hydrostatic method, as we may call it. A tube is introduced into the esophagus through the wound, and liquid food allowed to flow down from a reservoir held over his head. By this means nourishing diet, stimulants, and medicines can be introduced with great ease. care and watchfulness will be necessary to provide against the occurrence and results of secondary hemorrhage. At this time the head shall be kept low, and the extremities warm, to give him an opportunity to react from the hemorrhage and shock that he has sustained. When the case was admitted, transfusion was thought of, but it will not be required, for the circulation is not as feeble as might be imagined.

It is about six weeks since this man was shown to you before. The wound is now healing, but a large aperture still exists; through this he is still fed. His general condition is good. He is given by the hydrostatic method a mixture of beef-tea, milk, whisky, and quinine, which makes

through the mouth, the patient does not taste it. We do not attempt to feed him by the mouth, because the fluids would escape from the gullet and might enter the larvnx. It is possible that the cicatricial contraction resulting from the closure of this extensive wound may cause a stricture of the upper part of the œsophagus; but this, it is said, does not as a rule happen in such cases.

# INTERNAL HEMORRHOIDS REMOVED BY THE CLAMP METHOD.

The patient now presented has protruding from the anus a series of tumors of a florid color. These are internal piles, as is readily determined by their being covered with mucous membrane. Piles are made up of a mass of vessels, and might with great propriety be called a local vascular hypertrophy. Of all the methods of treating internal hemorrhoids, excision, with the aid of the clamp and cautery iron to prevent hemorrhage, is by far the most satisfactory. If they are ligated, the thread will act as a seton, and keep the patient in bed from ten to fourteen days, during which time there will be constant pain, and the urine for a day or two will have to be drawn off. After excision by the aid of Smith's clamp, the man can probably be out of bed the following day. It is not possible to cut off the tumors without-cauterization, because the patient might bleed to death by internal hemorrhage, which would be concealed in the rectum. External piles can be incised or excised without this risk. When you are about to operate. the internal hemorrhoids may be within the bowel, but the patient can force them down by seating himself over a bucket of hot water and bearing down. They may also be drawn out by an instrument of wood, which has a shoulder cut upon it so that it looks and acts like a large bulbous bougie. The clamp which I shall use in operating upon this case is that devised by Mr. Smith, of London. This is screwed together, so that its blades constrict the tumor and prevent hemorrhage when the scissors cut off the mass. Then the actual cautery is applied to the stump, and the blades of the scissors-like clamp are opened. The patient is now etherized, and I apply the clamp to a portion of the hemorrhoidal mass in a line radiating from the anus, in order to avoid producing narrowing of this aperture. The blades are screwed shut. an odd combination, but, as it does not go and the tumor is then cut off with a pair

of scissors; but care must be taken to leave a sufficient stump beyond the outer surface of the clamp to allow of thorough cauterization with the hot iron. After drying the stump with a towel, the red-hot iron is applied and the tissue seared. The clamp is now removed, and you see that not a drop of blood flows. The operation is thus performed upon three separate portions of the hemorrhoidal protrusions, making three linear eschars which radiate from the anal aperture. These cauterized stumps and the remaining tumors, which are small, shall be pushed back into the rectum. The after-treatment of the case is to be managed on general principles.

#### TRANSLATIONS.

Nervous Dyspepsia. — W. O. Leube states that many healthy persons experience peculiar nervous symptoms, as cerebral congestion, disinclination to work, weariness, fulness in the epigastrium, etc.,

immediately after eating.

These symptoms appear too soon after meal-time to attribute them to the absorption of certain products of digestion (e.g., lactic acid), causing a self-poisoning of the nervous system. It is more likely that they depend upon direct irritation of the nerves of the stomach by mechanical irritation from the ingesta; it is known that in physiological experiments the general nervous system is sometimes affected by direct irritation of the gastric nerves. The symptoms above mentioned become pathological when they reach a certain point, which they usually do as a result of perceptible gastric troubles, as catarrh, ulcer, cancer, etc., but occasionally without any perceptible cause, in which case Leube calls the affection nervous dyspepsia. The condition is usually found in persons whose nervous system is easily excitable, in the upper classes, during the earlier years of puberty, and frequently accompanying other nervous troubles.

This affection is distinguished from catarrh in that the appetite and digestion are undisturbed; from cancer of the stomach by the age, and the absence of cachexia or tumor; from ulcer by the absence of pain and by the happy effect of electricity; finally, it is distinguished from enlargement of the stomach by physical examination (Leube's examination with the sound).

The prognosis of nervous dyspepsia is not very favorable, and we must often be satisfied with relieving the condition without being able to cure it.

The treatment consists in easily digestible diet, ice, quinine, electricity, hydropathy. In one case ergotin acted favorably. As a subsequent regimen, sea-bathing or mountain air may be recommended.—Cbl. für die Med. Wissen., 1879, No. 23; from

Deutches Archiv f. Klin. Med.

THERMOMETRY OF THE VISCERA.—At a recent meeting of the Berlin Physiological Society, Dr. H. Kronecker showed a number of globular maximum thermometers. and also some new cylinder-shaped instruments intended for circulation in the bloodcurrent of living animals. Dogs could be made to swallow the globular thermometers without any trouble, while the cylindrical thermometers could be placed in the jugular or femoral vein or in the carotid artery without producing any disturbance. Those placed in the veins generally found their way into the peripheral branches of the pulmonary artery; occasionally, how-ever, they were found in the azygos, the renal vein, etc., or remained in the right auricle; in a few cases in the right ven-Those placed in the central end of the carotid and urged towards the aorta by injected blood were driven to the remote arterial branches. Clots were occasionally found in the cardiac cavities, from the presence of the thermometers, but not elsewhere. By means of these thermometers the amount of heat developed during digestion, some notion of the temperature in different portions of the circulation, and the locality of highest bodily heat were ascertained. The lowest blood-temperature of the inner portions of the body was found to be in the vena azygos (99.9° F.), the highest in the middle lobe of the right lung (105.9° F.) and in the empty intestinal canal (106° F.).—Reprint from Archiv f. Physiologie.

CHOREA CURED IN EIGHT DAYS BY THE USE OF SALICYLATE OF SODIUM. — Dr. Dresch had under his care a little girl, 10 years of age, of a scrofulous habit, who had suffered for eight days with choreic movements limited to the right side. She gave the history of hereditary tendency to neuroses, and had had an attack of rheumatism a week or so previously. Dr. Dresch prescribed salicylate of sodium in the dose of 3 iss per diem. At first the

medicine was vomited, but within a day or two it could be tolerated. At the end of six days the choreic movements had almost disappeared, and by the eighth day the patient was well, and continued so up to the date of the report. — Bull. Gén. de

Thérap., 1879, p. 506.

COLD ENEMATA IN FEVERS.—Lapin experimented in the case of some fifty patients. with or without fever, and in healthy persons, administering enemata of cold water and measuring the changes in axillary temperature. He found that enemata of 40° to 50° F. caused a fall of .5° to 1° F. in the axilla, from 1.6° to 2.6° F. in the hypogastrium, and from 2,2° to 9° F., together with a diminution in frequency in the pulse and breathing. The difference before and after the administration of the enema was first noticeable in the axilla. and remained for thirty or forty minutes. Healthy, and not feverish, individuals were first affected. - Cbl. f. Chirurgie, No. 29, 1870: from a Russian source.

ARTHRITIS OF THE KNEE CONSECUTIVE TO PHLEBITIS OF THE POPLITEAL VEIN.— Verneuil has already drawn attention to inflammation of the knee-joints as a severe complication of lymphangeitis of the lower extremities. His present communication is based upon three cases of serous or purulent knee-trouble as a complication of phlebitis of the popliteal vein, which takes up the veins from the joint and its neighborhood. Two of these cases occurred spontaneously in young, healthy men.— Cbl. f. Chirurgie, 1879, No. 28;

from Gaz. Méd. de Paris.

A Case of Suffocation from Asca-RIDES IN THE AIR-PASSAGES .- A child of 5 years, suffering from constipation, vomited an ascaris; castor oil was administered, and also vomited without producing any effect. In the following night vomiting suddenly occurred again, and the child raised himself up in bed and fell back, dead. Previous dyspnœa was not observed. The autopsy showed an ascaris doubled twice upon itself, jammed in the larynx and trachea. The worm was eight inches in length, and was looped with other worms at its lower end. carides were found in the œsophagus. -P. Donati, in Chl. f. Chirurgie, No. 28, 1879; from an Italian source.

THE PHYSIOLOGICAL EFFECTS OF GEL-SEMINUM.—In 1870, Prof. Wormley, of the University of Pennsylvania, extracted an

acid from the rhizome of the yellow jessamine which he called gelseminic acid. Later Tredike isolated an alkaloid gelseminum. Recently MM. Putzeys and Romiée have experimented upon this alkaloid, with the following results: gelseminum paralyzes the terminal cardiac filaments of the vagus in both the dog and frog. Galvanization of the cut end of the vagus fails to stop the heart's action, or even to slow it. even seems to augment the number of pulsations. MM. Putzeys and Romiée are disposed to regard atropia and gelseminum as somewhat similar in effect. Gelseminum produces a reduction in surface-temperature, due to spasm of the arterioles, and which is observed in the leg even when the sciatic has been removed. Examination of the retina shows the papilla blanched. A period of heat follows this lowering of the temperature, and then again a rise of temperature, after which the animal recovers or dies according to the dose em-Gelseminum dilates the pupil. but less markedly than atropia. The nervous phenomena produced are obscure. Sometimes a slight degree of tetanus is observed, an exaggeration of reflex sensibility; sometimes there is tremor; sometimes paralysis, preceded or not by convulsions. The authors are disposed to attribute this action of gelseminum on the nervous centres to cerebro-spinal anæmia rather than to the direct action on the nervous cells. -Brochure, Brussels, 1878; abst. in Le Progrès Méd., 1879, p. 471.

TREATMENT OF CARBUNCLE OF THE UPPER LIP.—Lindermann, in a case of malignant carbuncle which went deeper and deeper in spite of extensive incisions, made deep punctures with a tenotome, which were followed by hourly hypodermic injections of a two per cent. solution of carbolic acid, a syringe-full at a time, all around the border of the disease. After two or three days of this treatment the cedema, induration, and swelling had diminished, and the frequency of the injections was lessened. The result was favorable.—Arch. f. Klin. Chir.; from Cbl. f.

Chir., No. 24, 1879.

R Acidi tannici, 3ii;
Alcoholis absoluti, f3ss;
Ætheris, f3iiss;
Collodion, q. s. ad f3xij.—M.

# PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, AUGUST 30, 1879.

#### EDITORIAL.

THE NATIONAL BOARD OF HEALTH.

ON the 3d of March last Congress created a National Board of Health, and defined its duties to be to collect information on matters relating to the public health, and to give advice to the various departments of the national government and to State authorities upon sanitary subjects. The Board, in conjunction with the American Academy of Sciences, was also directed to prepare a plan for a permanent national health organization,—that is, to give an opinion as to what its own powers and duties should be.

The pressure of public opinion in the Southwest for quarantine was, however, too strong to permit of waiting for a report from the Board on this subject, and on the 2d of June another act was passed, establishing a so-called National Quarantine, under the direction of the National Board of Health, and appropriating five hundred thousand dollars for the purpose of carrying out its objects. It is popularly supposed that this act gives the National Board of Health great powers (even to emptying or burning an infected city, if necessary), and, as great power brings great responsibility, the Board has been sharply criticised on account of the present outbreak of yellow fever and its supposed failure to suppress it. The truth is, however, that so far from establishing a national quarantine, the act establishes the supremacy of State and local quarantines. The National Board is directed to aid and co-operate in enforcing the rules of State and local boards, which, being interpreted, means that it is to pay the bills.

It can make no rules and regulations of its own, with regard to inland quarantine, unless indeed a State should refuse to enforce one, in which case it may report the facts to the President, when he may order it to prepare rules, etc., etc., all of which would take several weeks or months.

Prompt and efficient action on the part of the national authorities is, in fact, almost impossible under the act. The State or Local Board must take the initiative. and ask for aid if it needs it; then the National Board is to make an estimate of cost for the decision of the Secretary of the Treasury as to whether the funds shall be furnished; and so delay must follow delay. In the present emergency this is, perhaps, less to be regretted, since inland quarantine, unless of the shot-gun order. producing absolute non-intercourse, has very rarely proved effectual in arresting the progress of cholera, plague, or yellow fever. The difficulties in establishing an effectual quarantine are so great that all practical sanitarians prefer to direct their efforts mainly to the securing of municipal cleanliness and pure air and water, in order to prevent the spread of contagious disease. The National Board seems fully aware of this, if we may judge from the instructions issued to its inspectors, but the law under which it acts relates exclusively to quarantine, and it can only obtain information as to the sanitary condition of the country as a secondary and incidental feature of the inspections of its agents.

Notwithstanding this limitation of the powers of the Board and its necessarily hampered action, it has begun its work, and is pursuing it with all possible diligence, having already prepared and issued a circular of advice as to what rules and regulations should be adopted by State and local boards with respect to quarantine. These rules may be considered as establishing the minimum amount of precaution to be taken against yellow fever in Northern ports, and are based upon

those in force at the port of New York, under the direction of Dr. S. O. Vanderpoel, who has been consulted by the Board in this matter from the beginning of its organization. We have also received six numbers of the weekly bulletin which the Board issues in accordance with law, each of them containing original matter of great interest to sanitarians.

It is too soon yet to judge of the merits of the National Public Health Acts, or of the operations of the Board, but it seems to be attending to its work in a quiet, common-sense sort of way, without any special flourish of trumpets, which is of good omen; and we sincerely hope that the experience of this summer will enable it to present a plan for a permanent National Health organization which will meet with general approval and consent; but the functions of such an organization must relate to public hygiene in the broad sense of the term, and not be limited to quarantine or to paying for quarantine, if it is to be of real value.

## PROCEEDINGS OF SOCIETIES.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

A CONVERSATIONAL meeting was held at the hall of the College of Physicians, Philadelphia, May 14, 1879, Dr. John H. Packard, Vice-President of the Society, occupying

the chair.

Dr. Carl Seiler made some remarks on new methods of microscopic investigations. He remarked that it is of the greatest advantage, in examining tissues with the microscope, to have as large a section as possible, and especially is this the case in pathological histology. He cited a case in which a tumor had been examined by one observer and pronounced to be a fibroma, while another observer had found it to be an epithelioma. This discrepancy was caused by the two observers examining sections made from different parts of the growth, which proved to be an epithelioma when a section of the entire tumor was examined. The doctor illustrated this part of his remarks by exhibiting an instrument devised by himself, for cutting large and thin sections of tissues, and which was known as Seiler's mechanical microtome. He then went

on to explain the methods of hardening tissues preparatory to cutting sections, and gave alcohol the preference over all other hardening agents, if it is used in a weak solution at first, and is gradually increased in strength until the tissue is thoroughly hardened.

He next alluded to the different inethods of staining the sections so as to differentiate the histological elements, describing the method employed by him for staining with lilac fluid and fixing, subsequently finishing the hardening by strong alcohol. When strong solutions of chromic acid were used, the outer portions of the piece of tissue were quickly hardened, preventing a further penetration of the liquid into the tissue, and in consequence the interior remained soft and in time decayed, making it thus unfit for microscopic examination.

Dr. Charles K. Mills inquired whether the use of alcohol for hardening specimens, and of acids for other purposes mentioned, might not in some cases so change the specimens histologically as to interfere with their proper

examination.

He was of the opinion that large sections are of great advantage, more particularly in studying certain diseases of the spinal cord or brain. In spinal sclerosis we can, by Dr. Seiler's method, readily obtain sections and study the progress and appearance of diseased processes in the different columns of the cord. By this method also large sections can be made of special regions, as the floor of the fourth ventricle, for instance, which is sometimes desirable. Large sections can also be used in determining the physiology and pathology of certain regions of the brain, thus contributing to our knowledge of the localization of functions in the cerebral cortex; for example, the relations to each other of, and the arrangement of elements in, the five or six layers which are known to constitute the gray cortical matter, can be readily investigated. It is well known that large sections both of spinal and cerebral tissue have frequently been made in the old way by skilful operators; but Dr. Seiler here presents us with a time-saving method universally avail-

Dr. Nancrede wished to testify to the extreme value of the method which Dr. Seiler has introduced. The case referred to by the lecturer in connection with a section which he exhibited was a most instructive one. A patient had an epithelioma of the lip, which was removed by Dr. Mears. Two years later the patient applied for admission into the Episcopal Hospital, with a tumor under the lower jaw, which the speaker removed, together with part of the bone. The specimen was examined by a committee, who pronounced the tumor a fibroid, and in the specimen they exhibited to the speaker the structure was made up decidedly of fibrous tissue. He came to the conclusion that it was one of the rare

cases of fibroid cancer, only two of which are on record, these both having been reported by Paget. In an examination of the tertiary growth, finding evidences of epithelioma, it appeared as if it might be a still rarer instance of fibroid cancer, being interchangeable with epithelioma, and that the terms fibroid cancer and epithelioma are synonymous. If a section such as shown by Dr. Seiler, of the entire growth, had been examined, it would have been all clear, where the epithelioma is very evident at one extremity but at the other is seen normal fibrous tissue.

Had this subsequent examination not been made, this case would have been regarded and subsequently quoted as a very unusual and peculiar case, whereas it was only a typical epithelial growth of secondary development. Suspecting that there was some mistake, Dr. Nancrede took the original imbedded portions from which the sections had been removed by the committee, and, levelling the surface of one, to his astonishment found in all his sections true epithelioma, thus showing that the first sections were not through the morbid tissues.

Dr. Seiler, in reply to Dr. Mills, said that alcohol, if used in the manner described, like all other hardening agents, such as chromic acid, picric acid, arsenic acid, etc., acts by dehydrating the tissue and by coagulating the albumen, thus producing no chemical change in that tissue. A shrinking, however, takes place, and especially if the alcohol be used too strong at first; but this is so slight, if the alcohol is gradually increased in strength, that no material difference can be detected in sections made from tissues hardened in this way from those made by the freezing microtome from the fresh tissue. The mineral acid used in removing the excess of color in the stained section, although a rather strong solution, has no other effect upon the tissue itself than to coagulate the albumen still further; and sections examined before the use of the acid, as compared to those after the application of the acid, also show no difference, even under high powers. In regard to brain-tissue, he said that the chromic acid, in the hardening agent known as Müller's fluid, was preferable to alcohol to a certain degree, and that he was in the habit of hardening brain, when large sections were to be made, by immersing the piece of brain in Müller's fluid for a few days, the coloring to be done with dilute hydrochloric acid.

Dr. Seiler next described his new method of double staining. He said that by the carmine only the nuclei of the cells were retained, while all the other histological elements remained colorless; but that these latter could be colored in different tints by a very dilute alcoholic solution of sulph-indigotate of sodium, which had the great advantage of giving a peculiar tint of either green or blue to certain

tissues, which was so constant that these tissues could, by their color alone, always be recognized. This double staining, therefore, formed a very important aid in diagnosis, in illustration of which the doctor cited another case of a tumor whose true nature was clearly made out only by the aid of double staining.

During the course of his remarks he passed around, for inspection among the members, very large sections, both single- and double-stained, of various tissues, among others a section of the entire adult human larynx through the vocal cords, measuring one inch by one inch and a half; a longitudinal section of the leg and foot of a five months' feetus, measuring one inch and one-third by three-quarters of an inch, and of extreme thinness and evenness, which were made by his new section-cutter.

#### THE NASAL DOUCHE.

Dr. Carl Seiler then made some remarks on the use of the nasal douche. He said that many practitioners had given up the use of the douche in the treatment of diseases of the nasal cavity, because they had found inflammations of the Eustachian tube and middle ear, as well as other unpleasant results, to follow the use of this instrument. Dr. Elsberg, of New York, and Dr. J. Solis Cohen, of this city, as well as himself, had but rarely met with a case in which any unpleasant results could be attributed to the use of the nasal douche, although these gentlemen employed this instrument constantly in their practice. He thought that the trouble was to be looked for in a want of attention to certain rules in the use of the nasal douche, which, unfortunately, were not generally known or appreciated by the profession.

These rules were, 1st, that the liquid used should be of the temperature of the body; 2d, that it should be of the same specific gravity as the serum of the blood, to prevent osmosis between it and the blood; a liquid of such density could easily be obtained by dissolving fifty-six grains of common table-salt in a pint of water; and, 3d, that the bottom of the vessel should not be elevated above the forehead of the patient using it, as otherwise the pressure is too great, and forces the liquid into the frontal sinuses. If used in this way, he felt sure that no evil consequences would be observed following the use of the instrument.

He exhibited several forms of nasal douche, and pointed out their merits and demerits, giving preference to a plain tin cup with a tube attached to the bottom, which is effective and, at the same time, so cheap as to be within reach of even the poorest classes. A capsule was also exhibited which was made of gelatin, and held the proper quantity of salt to be used, so as to overcome the difficulty and inconvenience to the patient of weighing or

measuring the salt every time the douche is to be used.

He, in conclusion, said that he was making experiments with other substances, astringent as well as disinfectant, besides the salt in the nasal douche, but had as yet not come to any definite conclusion in regard to the advisabil-

ity of using such reagents.

Dr. S. D. Risley said that he had paid no attention to the density of liquids applied to the mucous membranes. It was a new idea to him, and one for which he desired to thank Dr. Seiler. He was disposed to try it in the future, since there was much to be desired in our treatment of mucous surfaces, and this device may prove a valuable addition to our therapeutics. In directing various applications to the mucous membranes, he had done so from other theoretical considerations than osmosis. He had long since given up the nasal douche, believing it did far more harm than good. The osmosis of liquids, as presented by the lecturer, had not occurred to him as a cause for the bad results following its use. Nor had he ceased to use it from any fear that harm would come to the ears from its use. He had never seen any evil resulting to the middle ear from the liquids flowing into the tympanum through the Eustachian tube, and believed that the danger must be very much overstated. The only time he had ever witnessed this accident or knew of its occurrence was while using the posterior nasal syringe in his own hands. The patient was a young man, with enormously hypertrophied tonsils, under treatment for catarrhal deafness. A drop of the solution fell from the syringe into the larynx, causing a sudden and explosive cough. The syringe was emptied at the same instant, a part of its contents passing into the right tympanum, causing great pain and an extensive rupture of the membrane of the tympanum, which, however, healed rapidly and did no permanent harm.

While the abnormal situation of the orifice of the Eustachian tube might facilitate the entrance of fluids, as pointed out by Dr. Cohen, he thought the real necessity for the precaution not to swallow while using the nasal douche had not been mentioned. the act of swallowing, the orifices of the tubes are opened, and thus the entrance of air or liquid is facilitated. The otologist is constantly taking advantage of this fact in treating dis-ease of the middle ear. The nasal douche did harm very frequently, because in a very large number of cases relatively of nasopharyngeal catarrh the disease was not general until made so by the application of medicated liquids to healthy mucous membrane. He was convinced that in a very large number of cases the disease was a local one, originally set up, it might be, by a foreign body lodged in the nasal passages, or by some anatomical peculiarity bringing parts into contact which are normally separated, producing localized ulceration in the mucous membrane. In such cases the douche could be of no service further than to cleanse the nose and pharynx occasionally, the ulcer meantime being treated by topical applications. Medicated solutions applied by means of the douche must necessarily affect the healthy mucous membrane, sooner or later bringing on the chronic granular inflammation and profuse muco-purulent discharge met with in these cases of naso-pharyngeal disease. It remains to be seen whether the expedient suggested by Dr. Seiler will relieve the douche of the distrust which many feel regarding its value as a therapeutic measure.

Dr. J. Solis Cohen said that in his experience difficulty following the use of the nasal douche is generally due to the fact that the water has been used too cold. There is one point in this connection that is not well understood. The locality of the opening of the Eustachian tube varies in different persons, and the opening is of different shapes, being sometimes narrow and sometimes trumpetshaped. In most of the cases where there is trouble produced by the use of the douche, this opening is very patent and is situated

unusually low down.

Patients should be instructed not to swallow while using the douche, as the liquid may be forced into the open Eustachian tube and into

the middle ear.

The speaker does not use the douche to carry medicaments into the nasal passages and pharynx, but simply for the purposes of cleansing. The ordinary ball-and-tube syringe makes a good douche by starting the fluid with the bulb and elevating the basin above the head, when the water will continue to flow. It is a very good precaution, also, to observe, to have the water boiled that is to be used in the douche or as a gargle, which will precipitate and remove many of the impurities of the ordinary river-water.

Dr. C. Seiler agreed with Dr. Cohen, that

Dr. C. Seiler agreed with Dr. Cohen, that the douche should, as a rule, be used only for cleansing. He had been experimenting, however, with some cases, and was not prepared to assert that there might not be some exceptions. Some cases have done very well

under astringent injections.

In regard to Dr. Risley's remarks, he would say that he was aware that an ulcerated condition of the mucous membrane often exists requiring examination and topical applications. The douche is not curative in itself, but must be accompanied by local measures. In some cases, where there has been dryness of the mucous membrane without any special lesion, injections of the density and temperature of the blood, containing gr. x. nitrate of silver solution, had been of great service. He did not believe that a medicated solution of this character could be injurious to healthy mucous membrane, although it would stimulate the diseased surfaces.

PATHOLOGICAL SOCIETY OF PHILA-DELPHIA.

THURSDAY EVENING, APRIL 24, 1879.

THE PRESIDENT, DR. H. LENOX HODGE, in the chair.

Optic neuritis as a symptom of intracranial disease.

DR. WILLIAM F. NORRIS read a paper on "Optic Neuritis as a Symptom of In-

tracranial Disease' (see page 565).

Dr. Risley said he felt not a little hesitancy

Dr. RISLEY said he felt not a little hesitancy in opening the discussion on this subject, important as it is both to the general practitioner and the ophthalmologist. He felt all the more hesitation since in the present state of our knowledge there was nothing to add to the lucid demonstration given by the lecturer, for which he desired to tender his personal thanks.

There were, however, many things regarding choked disk and optic neuritis in their relation to intracranial disease that to his mind were very obscure. In the first place, why choked disk should be more frequently associated-as is claimed by some observers -with tumors of the cerebellum than with new growths located elsewhere in the cranial cavity. Again, if it were true, as stated by the lecturer, that the amount of irritation seemed of more importance in the production of choked disk than the size of the tumor, why do we not with relative frequency find it associated with those forms of intracranial disease, as tubercular and other forms of meningitis, which cause the rapid pouring out of fluid into the ventricles and subarachnoid space? If, on the other hand, the increase of the cranial contents by the mass of the tumor or by the fluid in the ventricles and elsewhere were the essential factor in choked disk, why did it not occur with relative frequency in hydrocephalus, and in forms of meningeal inflammation in which the thickening of the tissues gave greater increase of bulk than would occur in moderately large tumors?

Dr. Da Costa said that he had listened with the deepest interest to Dr. Norris's comprehensive statements, and it was more in the desire of calling attention to some clinical points than in the hope of adding anything to what had been said that he addressed the Society. First, with reference to the view that diseases of the cerebellum invariably caused choking of the disk, he knew from cases that had come under his own observation that this was far from an invariable rule. In one instance in which the symptoms of cerebellar tumor were well defined, and a considerable tumor found at the autopsy, not the least evidence of disease was found in the eye-ground, and the examination was made by the lecturer of the evening. In another case a similar negative result was obtained. There are, then, undoubtedly tumors of the cerebellum,

as well as of the cerebrum, in which the growth does not occasion choking of the disk, and the question had presented itself to him, whether this happened in tumors of quite special regions of the brain. Should this be the case if the symptoms are present, we might be led to conclude on the exact locality of the growth from the absence of signs in the eye-ground, or at least this could be used as strong corroborative evidence.

On the whole, his experience had been very favorable to the use of the ophthalmoscope in the detection of organic brain lesions, especially of tumors, and he thought that no diagnosis should be made without it. Allowing for the exceptional instances referred to, choked disk is so common that we may lay the greatest stress on its not being found; and thus the negative evidence becomes immensely valuable in a great group of puzzling brain disorders of suspected organic origin yet without marked structural change.

Dr. MILLS said that he had had the opportunity recently of making three post-mortem examinations in cases of cerebral tumor. Two of these tumors were situated in the anterior portion of the brain,—one in the frontal lobe and one in front of the optic chiasm; the third was a case of tumor of the pons Varolii. The tumor of the frontal lobe caused the most marked choking of the disks of both eyes that he had ever seen in any case; but, strange to say, the tumor located in front of the optic chiasm did not produce choked disk. Partial atrophy of the optic nerve of one eye was present, and the other eye could not be examined because of an opacity of the cornea. The tumor of the pons was unattended by choked disk.

In regard to cerebellar tumors, he agreed with Professor Da Costa. They certainly did not always cause choked disk; and he believed that they were most likely to bring about this condition when they were so situated as to cause bilateral pressure upon the venous channels. He had held an autopsy in one marked case of meningitis which showed no ophthalmoscopic changes during life.

The absence of ophthalmoscopic appearances of definite character in some cases of supposed disease of the cerebral convolutions is quite remarkable. He had been recently called by Dr. O'Hara to see a case in consultation, in which the patient was nearly blind in both eyes, and the other special senses and common sensation were all seriously affected. The case was supposed to be one of tumor or other lesion of the temporo-sphenoidal lobe, but ophthalmoscopic examinations made by Dr. George C. Harlan revealed healthy eye-grounds.

Dr. HARLAN said he knew of nothing to invalidate the opinion expressed positively by Hughlings-Jackson several years ago, that the condition of the disks does not afford the

slightest reliable indication as to localization of the cerebral lesion, and that optic neuritis occurs from tumors in many parts, probably in any part, of the encephalon. As to the manner of causation of choked disk, none of the theories proposed seemed to him entirely satisfactory; certainly no one met all the cases that have been reported. He agreed with the lecturer, that the most nearly satisfactory was that which pointed to the subvaginal space as the channel by which the morbid action was communicated; but, unfortunately for its general acceptance, there were cases of choked disk, recorded by high authorities, in which the nerve between the ball and the brain was found perfectly normal. Perhaps it was a mistake to confine ourselves to one and the same cause for all cases. He thought that the variety of opinions held by careful and honest observers and profound thinkers of itself proved, either that we have missed the true cause altogether, or that the result may be produced by several causes.

As to the nature of the affection, he believed that the problem of descending neuritis was comparatively a simple one, as the in-flammation had been traced anatomically from the brain to the eye; but that in typical choked disk we had a condition that was sui generis, quite distinct from any affection of the eye other than that resulting from cerebral causes. It differed objectively in the greater extent of the swelling of the disk and less involvement of the retina, and subjectively in less diminution of vision, which in some cases even remained perfect. Perhaps the nearest approach to the condition of the papilla in choked disk was found in albuminuric neuro-retinitis; but the vision was always seriously impaired in the latter. He thought it of interest, in this connection, that several cases of intracranial tumor had recently been reported in which the appearance of the eyeground closely simulated that of albuminuric neuro-retinitis. He had himself seen one case in which the ophthalmoscopic picture of albuminuric neuro-retinitis was almost complete, but in which the very slight degree of diminution of vision led him to suspect an The urine was found intracranial cause. to be perfectly normal, but general symptoms were developed which pointed very decidedly to cerebral tumor.

Dr. LITTLE said he thought the following cases would be of interest as bearing upon

the subject:

In October, 1878, a young man, while gunning with a friend, was accidentally shot by him in the face, scalp, and right eye. They were both standing on a stone wall, thirty yards apart, guns loaded with No. 5 shot; a partridge flew between them, and his friend fired, the shot taking effect as above stated. He suffered only a stinging sensation and loss of sight, and had to be helped down from his position; he was treated by a physician,

and in January, 1879, came under Dr. Little's observation.

One shot had gone through lobe of right ear; two shot were still present on right side of scalp; one about the median line in front; two more on left region of scalp. One shot had passed through right upper lid, through sclera of right eye, one-quarter of an inch from corneal junction, at upper and outer quadrant of right eye, on through choroid, retina, into vitreous, etc.; another shot was found at inner angle of left eyelid, but no shot in left eye.

Tension of right eye, —3; left eye, normal. Perception of light in right eye, at the inner and upper part of eye. No perception of light

in left eye.

Patient stated he was sure he had seen with both eyes before the accident; being ambidextrous, he could shoot to advantage aiming with either eye; had tested sight in other ways as well; saw none after the accident. Ophthalmoscopic examination revealed in right eye detachment of retina, general; sub-retinal effusion; loss of choroid at entrance of shot, scleral surface showing the sclera was depressed at seat of wound; got a reddish reflex only from inner and upper part of eye; seen best with a +6 (focal); opacity existing at inner and lower portion of eye; could see no shot in right eye, on account of the general disorganization on the exit of it. No iritis; no synechia; slight peripheral change in lens. Said at first there was a reddish tinge to what light perception he had, which, as blood became absorbed, changed to a bluish tinge. Electric current produced about natural symp-The left eye presented a true picture of atrophy; vessels small and tortuous; eve emmetropic. The nerve appeared as if it had undergone the change we expect to find after choked disk; 'no other condition present. Total loss of function; no response from electric current.

How to account for loss of sight in this eye became interesting and difficult. How to account for the choked disk that had evidently existed is of importance. The patient had exhibited no meningeal symptom; vision was immediately lost, and, not having had atrophy in the nerve prior to the accident, it appears evident that the shot which passed through the right eye must have passed through it and through the orbital wall of the right eye, on into the left orbit, and either cut the left optic nerve or been imbedded in or about it, or else one must have entered the left orbit and done the damage,—yet no scar could be found to make this clear. Sight was lost, then, by cutting of the nerve, and subsequently inflammation produced changes in intraocular end of nerve. It was not the result of meningitis.

Another case came to his mind that might be instructive, where there was total loss of function of one optic nerve and no sign of choked disk, and where he had every reason to believe a tumor, syphilitic in character, existed in the cranial cavity. He saw the patient for the first time yesterday, who gave the

following history:

"Three weeks ago I observed I saw double, and that my upper lid drooped slightly; also my vision was a little indistinct in the right eye (the affected one). I also felt inclined to brush away from face on the right side what I supposed to be a hair rubbing my face,—in fact, the whole right side of face felt different from the left, and my hearing in right ear was not so acute as on left side. Gradually vision failed in right eye, when I consulted a physician, who referred me to an oculist."

On examination, Dr. Little found that thirteen years previously he had had the initial lesion of syphilis, which he had treated and healed himself. One month prior to his seeing double he suffered from a very severe neuralgia of right side of face and head; then the symptoms as above occurred. April 23, found slight ptosis of right upper lid; divergent squint of right eye; hyperæsthesia of infraorbital nerve of right side; hearing of right ear (watch at four and a half inches); no cerumen in meatus.

Tension normal in right eye.

Perception of light faint in upper portion of retina, and towards inner and upper portion very faint.

Electric current produced no sensation of

light.

Left eye normal, but ametropic; myopic astigmatism. Ophthalmoscope reveals only marked venous pulsation; edges of nerve slightly foggy (—24 focal clearest). No retinitis; no swelling of disk; no cupping.

This case presents total loss of function of

This case presents total loss of function of nerve without choked disk, and yet showing an undoubted clinical history of a cerebral

tumor

These cases are interesting from their negative condition: in the one a choked disk occurring, with subsequent atrophy and no meningeal symptoms; the other, loss of function of the nerve, due to intracranial conditions, and no choked disk showing as yet. We do not know all about this subject yet; cases are seen generally so late. This last case will be interesting to follow, and the former one only an autopsy can decide.

The lecturer of the evening has given a

The lecturer of the evening has given a clear and unbiased narration of the history of the subject, and made a beautiful exhibition of the anatomical conditions. Pathologically we must give preference to the theory he upholds,—that the sub-arachnoidal space is the source of communication between the brain and the intraocular end of the optic

nerve.

Dr. Longstreth said that in 1876 he had occasion to make a collection of cases of tumors of the brain. The period included in his collection covered the years from 1865 to

1875, and embraced all the cases to be found in medical literature of all languages during these years, as well as a few unpublished cases from Norway, obtained through the kindness of the commissioner to the Centennial Exhibition from that country. It was intended to embrace in this a period, on the one hand, commencing with the use of the ophthalmoscope in the study of this disease, and, on the other hand, ending with the time when attention began to be directed to the localization of brain-function. Furthermore, it was intended to be a continuation of the work which Ladame had accomplished on this subject for the time antecedent to the year 1865. By those familiar with the subject, it will be seen that the first cases of prominence published dur-ing this period were those of Von Graefe, giving the results of his work on the connection between disease within the cranium and changes at the intraocular end of the optic nerve. The number of cases to which reference has been made, and whose clinical features were collected, gave a total of a few more than six hundred: none were here included in the list, nor was any reference made to such cases where the diagnosis had not been confirmed by an autopsy. During the year, or a little more time, while engaged in the work, Dr. Longstreth examined post mortem the bodies of six persons in which tumors of the brain were found. In all of his own cases, symptoms or changes in the optic nerve and retina were present during life, except in one case of multiple large tubercles, in which no ophthalmoscopic examination was made and no symptoms were manifested connected with the brain or with vision. It is possible that the symptoms in this case were masked and overlooked in the presence of the extreme exhaustion due to the chronic tubercular disease of the lung, from which the patient died. The case, however, formed no exception to the rule which held in the other cases, because an examination of the optic nerves, post mortem, showed marked alterations.

Of all this large number of cases the records of which had been examined, a very considerable number gave no account of the vision or of the results of an ophthalmoscopic examination; a still larger number furnished no account of the condition of the optic nerve and retina. Of the remainder, by far the larger portion, in which the record speaks of the condition of vision and its apparatus, very few indeed failed to show a deficiency in sight, or, by the ophthalmoscope, well-marked changes of the optic nerve and retina in one or other of the various stages and conditions resulting from intracranial pressure or from inflammatory changes of the brain and its

membranes.

Dr. Longstreth was not able to state at the moment how small was the proportion of the cases in which an ophthalmoscopic examination had been made in which no changes were found in these organs when the post-mortem examination proved the existence of a brain-tumor or other disease capable of causing increased intracranial pressure. M. Reich (Russian), in the Monatsbl. f. Augenheilk., 1874, states that, from an analysis of a moderately large number of cases, nearly all brain-tumors, in which a careful ophthalmic examination was made, the proportion was ninety-five in one hundred where optic changes were found. In Dr. Longstreth's very much larger collection, which included M. Reich's analyzed cases, the proportion was certainly not less than the figures mentioned.

It was to be noted that a few observers record the occurrence of appearances in the retina similar to the changes resulting in albuminic retinitis, although the reports show that no Bright's disease was indicated by the

condition of the urine.

In regard to the changes in the outer sheath of the optic nerve, Dr. Longstreth had seen the ampullar dilatation well marked in some of the cases which he had examined post mortem, and in the records of his collected cases the condition was frequently noted. Dr. Longstreth had not found it necessary to ligature the optic nerve, previous to removal, to preserve the distended condition of the nerve-sheath. In none of his own cases had the distention been extreme, but in all of them, where the eyes had been examined, the condition was easily seen and well marked

in the microscopic specimens.

The position of tumors, in reference to their capability of producing eye changes, did not, from a general survey of the collected cases. seem to be a point of much importance, and, apparently, no general law could be deduced concerning it. Tumors, in whatever position, seem equally capable of producing eye changes. It may be mentioned that small tumors, and, more rarely, also large growths, have occasioned optic-nerve and retinal changes visible in one eye only. Perhaps a condition of more importance is the effect resulting from tumors situated below the tentorium or in close relation to its straight sinus. It is unquestioned that the pressure brought to bear on this important pathway of the returning blood from the lateral ventricles, or on the venæ Galeni, does cause a set of symptoms which become valuable as indicating a tumor seated in close connection with this membranous partition within the cranium. The prevention of the return of blood from the veins of the ventricle and the choroid plexus results in the accumulation of fluid within these cavities, and in this condition of a distended ventricle we have a cause, acting in addition to the intracranial pressure due to the tumor itself, which tends to produce stasis of blood or other changes in the optic nerve and retina.

Another consideration of importance, which deserves more attention than it has as yet re-

ceived, is whether other cranial nerves, either sensory or motor, exhibit changes post mortem, or give rise to symptoms ante mortem, of a similar character to those found in connection with the optic nerve and vision. The cranial nerves frequently suffer from the direct pressure of intracranial growths, but among the whole number of cases collected, or among a large number of papers consulted on this subject, one or two only furnish any allusion to anatomical changes, to symptoms due to increased intracranial pressure, or to neuritis produced by a tumor not directly in contact with a nerve-trunk other than the optic.

From the anatomical arrangement and openness to observation, as well as the careful study devoted to it, it is, of course, more likely that the changes in the optic nerve should have been discovered and discussed before similar alterations in other sensory or even motor nerves. While it may be true that the anatomical connection of the optic nerve with the brain and cranial cavity being such as it is, and quite peculiar to itself as distinguished from the other cranial nerves, alone subjects it to the changes which we know occur in this nerve from this cause. still it is not improbable that some, if not similar, alterations or symptoms may affect other nerves. One of the cases of this collection furnishing some evidence in support of this hypothesis was an instance of alteration in the sense of smell (subjective olfac-The auditory nerve seems to be the one in which the next move in advance will most probably follow the discovery in connection with the changes of vision. The structure and function of this sense are the next best studied, and it is probable that some of the uses of the auditory nerve are at present unknown. The comparatively recent statement that the semicircular canals of the ear have to do with the equilibration of the body seems to furnish a pathway of advance in the study of this hypothesis. The symptom of vertigo, so universally coming as the result of an intracranial growth, may be a phenomenon of similar import to some of the symptoms in relation to vision. Hasse has pointed out that the semicircular canals are connected with the cranial cavity by means of lymph-passages passing through the substance of the petrous bone. If, therefore, the intracranial pressure is increased, and does, as we know, propagate such pressure, by means of the optic-nerve sheaths, to the intraocular end of the optic nerve, it is not unlikely that pressure should be felt within the semicircular canals, and that similar symptoms should occur as in aural vertigo or Ménière's disease.

Dr. Shakespeare said that he could not endorse the sentiments enunciated in the opening of the debate concerning the relative frequency of choked disk in tumors of the cerebellum and the comparative infrequency

of ocular trouble in hydrocephalus and tubercular meningitis. Neither his reading nor his personal observations permitted him to accept the opinion very widely entertained, that the occurrence of choked disk is much oftener associated with tumors located beneath the tentorium than in other places. Careful analysis of reported cases has repeatedly shown that disturbance of the optic nerve in intracranial disease is far more common in lesions at the base of the brain than at any other point within the cavity of the cranium. Such investigations have very positively demonstrated the fact that nowhere is any morbid growth-a tumor or an inflammatory exudation - so likely to cause serious trouble somewhere in the course of the visual nerve as when it is located at the base of the brain in the middle fossa and near the median line. And this is what should be rationally expected, in view of what is known of the anatomy and of the pathology of this region. For it is just here—in the neighborhood of the cavernous sinus, of the optic foramen, of the optic nerves, the chiasm and optic tracts, etc. - that an exostosis, a thickening of the membranes, a compara-tively localized meningitis, a small or a large morbid growth, can most certainly do mischief to the continuity of the optic nerves, or affect their blood or lymph circulation. Among several who, during the last decade, have studied large collections of cases. Allbutt and Annuske may be mentioned in support of these remarks. Of five or six cases of opticnerve lesion associated with brain-tumor which had come under the observation of Dr. Shakespeare during the last two years, in all but two the tumor was seated at the base of the brain *in front* of the posterior fossa; and of the two exceptions, one was a tumor of the pia mater destroying a small extent of the cerebral cortex of both the right anterior and posterior transverse parietal convolutions about midway in their course; the other was the case already referred to by Dr. Mills, where a large tumor was located in an anterior lobe. These two cases offered the most marked examples of choked disk he had ever seen.

Concerning the frequency of lesions of the optic nerve in cerebral affections, he thought that several considerations should induce us to give small weight to some objections which have been urged against the value and the significance of the presence or absence of evidence of disease at the intraocular end of the visual nerve in cranial disorders. In the first place, it is now well known that in ædema of the disk, in "stauungs-papilla," and even in neuritis and in the early stages of simple optic atrophy, vision is often not sufficiently affected to attract the attention either of the patient or physician; yet this fact has no doubt caused many cases of optic-nerve involvement to be entirely overlooked and

excluded from the number which has furnished the percentage of optic-nerve lesions in the various forms of cerebral disorders. In the second place, there can be little doubt that, even where the ophthalmoscope has been used, many cases of eye lesion have been unrecognized or misconstrued. It is a patent fact that even experienced observers have confused choked disk with descending neu-Not infrequently the early stages or the slightly-developed forms of each of these two distinct affections have failed of recognition; especially is this likely to have been the case where the eve-ground has been examined by one not greatly skilled in the use of the ophthalmoscope,—an instrument which is even more difficult to master than is the microscope. Here, again, it is very probable that a large number of cases which would properly belong in the category of eye troubles dependent upon intracranial lesions have been excluded.

In making ophthalmoscopic examinations in these cases, the varying pictures of what has been called choked disk have not always been sufficiently appreciated. It has been very clearly demonstrated that the complete process known as choked disk, if it be allowed to pass from beginning to end, presents five distinct stages, each one of which affords an ophthalmoscopic picture different from the others, and which is more or less characteristic according to the activity of the special phase of the morbid process at work at the time of observation, whether it be œdema, engorgement, inflammatory exudation, partial atrophy, or complete atrophy. From examination of the fundus during the continuance of either the first or last stage alone, it is extremely difficult, if not indeed impossible, to say that there has been or will be developed a stauungs-papilla or choked disk. So, also, the ophthalmoscopic picture of descending neuritis may be considered as a shifting scene of at least four parts, each different from the others, and the two last sometimes so closely resembling the fourth and fifth stages of genuine choked disk as to make it nearly impossible by the eye to separate the one from the other. It is often difficult to discriminate between a simple degenerative atrophy of the optic disk and such atrophies as follow in the course of choked disk, descending neuritis, and other acute or subacute irritations of the nerve. In these varying pictures he found further reason to believe that a still larger number of cases of involvement of the nerve of vision had been excluded from the enumeration.

He could therefore readily accept the conclusions which Annuske had proclaimed at the end of his study of nine hundred and twenty cases,—viz., that neuritis (or choked disk) is an almost constant symptom in cerebral tumors, and that there ought to be assigned to it a value greater than that which has been accorded to it up to the present time.

Dr. Shakespeare also excepted to the intimation that in hydrocephalus and in tubercular meningitis choked disk and optic neuritis are infrequent occurrences. writers who have enjoyed abundant opportunities of studying the eyes in these affections, both in children and in adults, use most positive language expressive of their belief that at some time in the course of the trouble either choked disk or optic neuritis makes its appearance. Allbutt may be quoted in support of this opinion. Bouchut is still more dogmatic in his declarations on this point; and numerous other equally high authorities might be cited.

He admitted as possible the production of choked disk by the intervention of any one or more of the causes claimed by authors. but he thought that in the vast majority of cases the strangulation of the disk is caused by a damming up of the lymph in the subvaginal space of the optic nerve. He could not deny the force of the experiments and investigations of Schwalbe, Schmidt, Manz, et al. upon the lower animals. His own experiments, made in conjunction with Dr. Norris, upon still-born and older children, clearly demonstrated to him the existence in the human subject of a comparatively free communication between the lymph spaces surrounding the ocular end of the optic nerve and those of the sub-arachnoid of the brain. In the same connection, he thought that those cases reported of pachymeningitis hæmorrhagica, and of suppurative meningitis, in which, respectively, blood and pus had been found present in the sub-vaginal space of the optic nerve post mortem, offered the strongest evidence in corroboration of experimental researches. He consequently saw no way to escape the conclusion that an increased amount of fluid at the base of the brain, or any other condition which would naturally interfere with the free voidance of lymph from the sub-vaginal space of the optic nerve. could very readily occasion an ædema of the optic disk and the development of a genuine "stauungs-papilla." He had been much interested in the remarks advanced, in the course of the debate, upon conditions of other nerves of the cranium analogous to that of the optic nerve. Concerning inflammation, it has already been sufficiently shown, by microscopic examination, that a descending neuritis, identical, histologically, with that which often attacks the optic nerves, may extend along any of the nerves which pass from the cranium at points where the conditions are favorable. Reasoning a priori, we would have every right to assume that an increased quantity of fluid in the sub-arachnoid spaces of the brain could cause an ædema of any nerve favorably situated with respect to the location of the fluid; and observations are not wanting in support of this rational assumption.

He desired to state a fact which would pos-

sibly throw some additional light upon the subject. While making his injections into the sub-arachnoid spaces of the brain, for the purpose of tracing the lymph connection between that organ and the eye, he had found, in several cases, that the injection also passed into the meninges of the spinal cord, from one end of it to the other, and also travelled along the course of each one of the spinal nerves as far as they were traced, - beyond the bony canal.

## REVIEWS AND BOOK NOTICES.

A MANUAL OF MIDWIFERY FOR MIDWIVES AND MEDICAL STUDENTS. By FANCOURT BARNES, M.D. Aberd., M.R.C.P. Lond., Physician to the General Lying-in Hospital, etc. Philadelphia, H. C. Lea, 1879. Octavo, pp. 201.

This little volume at the first view presents an attractive appearance. On opening the book we find it to be handsomely printed on tinted paper and embellished with a number of well-executed wood-cuts of large size for

the dimensions of the work.

Scanning its pages, our admiration for the publisher's work is quickly changed for a feeling of disappointment at that of the author.

Whatever objections exist in the mind of the student to manuals as a class, all must admit that under certain circumstances they are useful; but in the case before us we have an illustration of nearly all the objections which can be urged against such works.

We find, on perusing the title-page and preface, that the book is intended for midwives, though it is also recommended to students of medicine or recent graduates in attendance on their first cases of labor. After reading this and finding the volume so small, we at once conjecture that we shall find in the body of the work a brief, practical, and distinct account of all those methods of treatment of normal labor and the minor diseases of the pregnant and parturient woman which relieve her from many annoyances and often act as prophylactics of more serious disease. What is our surprise, therefore, to find an attempt made to cover almost the whole subject of obstetrics in a work of less than two hundred pages, much of the space on which is occupied by large wood engravings!

As an inevitable result, much of practical importance is left out; and we do not think the author has displayed very good judgment in this respect. If there is one pathological condition which claims the earnest attention of the midwife and taxes her utmost skill more frequently than another; if there is any morbid condition in which precaution and early attention save weeks of suffering to both mother and child, it is to be found in

sore nipples: and yet our author dismisses the whole subject in eleven lines. Extrauterine pregnancy, its varieties, causes, symptoms, history, and treatment, are all embraced in less than a page. Version by the introduction of the hand into the uterus—an operation sometimes performed very successfully by women—is not described; neither is the application of the forceps; while, on the other hand, we find a whole chapter, liberally illustrated, devoted to deformed pelves, their varieties, causes, etc.

Nor is this all: the style is indefinite, and omissions and inaccuracies are frequently observable. The axis of the cavity of the pelvis is said to consist of a series of "imaginary lines drawn at right angles to the various imaginary planes of the pelvis," the word "centres" being omitted. We are told that the cavity of the true pelvis is lined with the psoas and iliacus muscles. In describing the supports of the uterus, no mention is made of the strong utero-sacral ligament, which, according to Aren and others, constitutes the chief support of this organ. Among the signs of pregnancy, no allusion whatever is made to the changes in the sebaceous glands of the areola, to which Montgomery gives so much value.

The directions for treatment, it seems to us, are not sufficiently comprehensive; nor are they given with the clearness which in such a work is imperatively required. In describing that for puerperal convulsions, bleeding is not even mentioned, reliance being placed entirely upon chloroform, chloral hydrate, the bromides, and morphia. In post-partum hemorrhage the attendant is directed, after using ergot, manipulation, and cold applications, "to inject a solution of iron (sic) into the uterine cavity." In describing the method of treatment of placenta prævia, no distinction is made between partial and complete.

These few instances are all that our space will permit of giving, but we might fill pages with extracts of like nature. The author seems to be well up to the times in his views of pathology, so far as he enables us to understand those views, and writes in an agreeable,

easy manner.

The last chapter in the book, on the management of infants, is, in our opinion, the best, and contains some very useful advice, though, in common with most English works upon this subject, weaning, either partial or complete, is recommended at an earlier age than is found to be compatible with safety in our climate.

E. R.

MEMORANDA ON POISONS. By THOMAS HAWKES TANNER, M.D., F.L.S. Fourth (American) Edition. Philadelphia, Lindsay & Blakiston, 1879. 32mo.

This manual of the late Dr. Tanner has been carefully edited, with some emendations, and continues to be one of the most useful books of its class. Toxicology is one of those things that the average doctor knows more about on the day of examination for his degree than at any subsequent period; and yet the knowledge is just such as may be required at any moment. We venture to call this one of the few books that no physician can afford to be without.

LABORATORY TEACHING: PROGRESSIVE EXERCISES IN PRACTICAL CHEMISTRY. By CHARLES LOUDON BLOXAM, Professor of Chemistry in King's College, London, etc. Fourth Edition, with Eighty-Nine Illustrations. Philadelphia, Lindsay & Blakiston, 1879.

Students of chemistry twenty years ago regarded "Abel & Bloxam" as one of their most valuable helps; and when the surviving author of that well-known work put forth his manual of "Laboratory Teaching," it was very generally sought for, and has proved its value by running through three editions. For the beginner in chemistry, or for the medical student who desires a knowledge of practical chemistry and of the ordinary operations of the laboratory, this book is to be recommended as a safe and satisfactory guide. The directions are simple and clear, the illustrations to the point, and the apparatus described is not expensive. It is a book which should be in every laboratory.

TRANSACTIONS OF THE PATHOLOGICAL SO-CIETY OF PHILADELPHIA. Volume VIII., containing the report of the Proceedings from September, 1877, to July, 1878. Edited by J. Henry C. Simes, M.D., etc. Philadelphia, printed for the Society by J. B. Lippincott & Co., 1879.

This volume of the Pathological Society's "Transactions" contains the record of a fair year's work, about seventy contributions being included, under the head of affections of the osseous system, the digestive apparatus, the vascular, respiratory, and genito-urinary system, together with the organs of special sense. The long and very complete dissertation on "The Causal Lesions of Puerperal Eclampsia," by Prof. James Tyson, and the reports of the Committee on Morbid Growths, are worthy of the Society. We regret the comparatively small number of active workers in the Pathological; the names of only thirty contributors appear in the present volume.

INTRAVASCULAR ALIMENTATION BY PEPTONE.—Dr. G. B. Fowler recently injected six ounces of a solution of beef peptone into the median basilic vein of a patient of Dr. Paul F. Mundé, who had become exhausted by uterine hemorrhage, with a favorable result. The method of making the peptone and the apparatus used for injection will be found described in the New York Medical Journal for June, 1879.

## GLEANINGS FROM EXCHANGES.

OPERATION FOR THE RADICAL CURE OF CONGENITAL INGUINAL HERNIA IN THE CHILD. — Dr. George Buchanan, finding Wood's operation with pins unsuccessful in his hands, determined to perform an operation consisting of opening the sac and oblit-erating the canal by the introduction of strong sutures. He reports the case of a male child, of 16 months, who was the subject of congenital inguinal hernia, which was observed shortly after his birth. It had grown with his growth, and when examined was the size of a turkey's egg, and distended the left side of the scrotum. Trusses had failed to keep it in place. When it was reduced the finger could be pushed into the abdomen, but the gut came down alongside of it. The opera-

tion was as follows:

The patient having been chloroformed, the rupture was returned and kept up by the finger of an assistant; a longitudinal incision was made along the whole length of the sac, from opposite the internal ring to the bottom of the scrotum. This divided all the textures down to the peritoneal sac, which, as usual, had been thickened by the presence and movements of the hernia. With the handle of the knife and a few touches of its point Dr. Buchanan separated the sac from its superficial structures, leaving the posterior part lying over the cord, which was seen behind. He then divided the sac into two halves by a transverse cut, except at the back, where it was adherent to the cord. One-half was folded down over the testicle so as to form a sort of tunica vaginalis. The upper half was rolled into a ball or plug, which he pushed into the internal abdominal ring, and had it kept there by an assistant. The walls of the inguinal canal were now approximated as in the operation for radical cure of hernia in the adult. Pushing aside the structures so that the relations of the ring and canal could be seen, a strong nævus needle was pushed through the external pillar of the canal at a spot opposite the internal ring. Then, guiding it with the point of his left fore-finger lying in the internal ring, he made it lift up the lower border of the internal oblique muscle and emerge through the internal pillar of the external aponeurosis, about half an inch above its lower edge. A strong waxed-silk thread was now passed through the tissues with the aid of the needle, and this was followed by a second, including the rolled-up bit of sac carefully placed with its external raw edge outwards. The edges of the external ring were now drawn together tightly above the cord by a strong silver wire made to take a very strong deep hold. For this purpose it passed through the tendon of in-sertion of the internal rectus. The wire, when drawn through, was clamped and retained by

a little rod of silver. The silk threads and wire hung out of the bottom of the wound. which was closed with antiseptic precautions. The child was placed on a St. Andrew's cross, the upper arms of which were joined by a sheet of calico, on which the body rested, the legs being securely bandaged with strips of adhesive plaster to the lower limbs of the cross. The pelvis and chest were also securely fixed to the apparatus. In this way the movements of the child were securely controlled. A perfect recovery was the result; and Dr. Buchanan says he shall in future employ this operation, not only in the case of children, but also in adults, where the operation for strangulated hernia has been performed.— British Medical Journal, May

ABSENCE OF SIGHT IN ONE EYE WITHOUT THE CONSCIOUSNESS OF THE PATIENT.-Dr. C. R. Agnew reports the case of an intelligent lawyer, 33 years of age, who saw perfectly well with one eye, while his other eye was so blind as to be practically useless, except as it enlarged his field of vision, without any suspicion on his part that he saw any better with one eye than with the other.

Inspection showed the right eye normal in every respect, while vision in the left was only one-thirty-third that of its fellow. Upon examining this eye with the ophthalmoscope he found that there was no error of refraction, and that the cause of the great functional disability of the eye was a large plaque of choroidal atrophy occupying the region of the macula. This plaque was irregularly circular, about four times as large as the optic disk, richly bordered with pigment, and with large choroidal blood-vessels coursing through it in various directions. It was not very nearly approached by any of the retinal blood-vessels. The optic disk and other parts of the fundus were apparently healthy.

It seemed most probable, from the appearance of this atrophic plaque, and from the fact that there was no history of conscious trouble with this eye, that it was a congenital defect.—The Hospital Gazette, July 5, 1879.

Muscle-Beating.—Dr. Althaus describes

an instrument intended to take the place of rubbing and shampooing. It consists of an india-rubber handle, from the upper part of which three sticks, or rather tubes, likewise of india-rubber, are made to branch off. The patient is directed to take hold of the handle, and to beat rhythmically with the tubes the part upon which it is intended to act. instruments are made of different sizes and strength, according to the requirements of the case, and it is recommended to continue the beating for ten minutes at a time.

Dr. Althaus advises its use in infantile paralysis and for chilblains; for habitually cold feet, and in slight cases of muscular rheumatism, it deserves a trial. He would, however, prohibit its use in cerebral paralysis, or wherever there may be some central irritation, whether cerebral or spinal.—British

Medical Journal.

WARM WATER IN SURGERY.—Dr. A. H. Goelet, confirming Dr. Hamilton's views, reports cases of traumatic erysipelas, lacerated and contused wounds in general, but especially those of the scalp, compound fractures, gunshot wounds, and traumatic gangrene. The warm-water application may be made: (1) by a water bath, when the limb is submerged in water kept constantly at the same temperature (generally about 100° F.), disinfected when so desired, and changed as often as necessary (about twice a day will generally suffice); (2) by means of hot fomentations, which consist of a layer of cotton batting, or two thicknesses of sheet lint, saturated with hot water (previously disisinfected if so desired), applied closely and evenly to the part. and kept at an even temperature by a covering of oiled silk. In this case it will be necessary to wet the dressing about every two hours, and change it twice a day, or oftener in cases where there is profuse suppuration. In cases of erysipelas the dressing must extend a little beyond the limit of inflammation. Dr. Goelet gives a number of cases in which one or the other of these plans of treatment was employed with great success. - American Journal of the Medical Sciences, July, 1879.

TOPICAL USES OF ERGOT.—Dr. William C. Dabney has 'used ergotin in conjunctivitis, where the blood-vessels were enlarged and tortuous, with excellent results. The eye was frequently cleansed with warm water, and after each washing a few drops of the follow-

ing solution were instilled:

R Ext. ergotæ, gr. x; Glycerinæ, f3i; Aquæ, ad f3i.-M.

In acute conjunctivitis, or where there is much intolerance of light, the result is not so satisfactory. In pterygium, Dr. Dabney has also used ergot successfully, a solution of the strength mentioned being used three times a day, and the growth checked thereby. In pharyngitis a solution of Squibb's solid extract is useful, and in other pharyngeal affections the following formula has been found to do good

R Ergotinæ, gr. xx; Tinct. iodini, f3i Glycerinæ, ad f\(\frac{7}{2}\)i.—M.

To be applied to the pharynx freely twice a

day with a camel's-hair brush.

In uterine troubles, particularly cervical metritis, the following suppositories may be used with advantage:

R Ergotinæ (seu ext. ergotæ), gr. xx; Ext. belladonnæ, gr. ij;

Ol. theobromæ, q. s.

M. Fiat in suppos. no. vi.

Insert into the vagina every night after the hot douche. In warm weather, a pledget of cotton saturated with the following solution may be inserted into the vagina every night after the hot douche:

R Ergotinæ (seu ext. ergotæ fld.), 3ss:

Ext. belladonnæ, gr. vi;

Aquæ et glycerinæ, āā, fʒiv,—M,
-American Journal of the Medical Sciences,

July, 1879.

HOW TO MAKE A SPICE-BAG.—Take half an ounce each of cloves, allspice, cinnamon, and anise-seeds, bruised, but not powdered, in a mortar, put these between two layers of coarse flannel about six inches square, and quilt them in. Soak this for a few minutes in hot spirits (brandy, whisky, or alcohol) and water, equal parts. It is to be applied while warm; renewing it when it gets cool. Used in the diarrhœa of infants and children we get not only the effects of a poultice, but also the sedative and antiseptic effects of the spices.

—Dr. A. A. Smith, in New York Medical Record.

TREATMENT OF INFANTILE CONVULSIONS.— Dr. Simon says that in general the prognosis of convulsions is not serious. Convulsions ushering in an acute disease are not dangerous, whereas those occurring at its close are nearly always fatal. Repetition of convulsions renders the prognosis more and more unfavorable. Until urine has been freely voided an attack of eclampsia cannot be considered as

terminated.

As to treatment, Dr. Simon takes issue with the late Prof. Trousseau, who advises little or no treatment. Dr. Simon proceeds at once to an active treatment without attempting too fine a diagnosis. He first administers a purgative enema containing senna, five grammes, and sulphate of sodium, fifteen grammes, or, lacking these ingredients, he extemporizes a stimulating injection. Next, at the first subsidence of spasm, he empties the stomach by an emetic. If the attack continue, he himself prepares and administers a hot mustard bath to the little patient. A sedative draught containing bromide of potassium, two grammes, syrups of codeia and of ether, cherry-laurel water, etc., is to be given (to a child fifteen months old) in small quantities, as rapidly as the child will take it.—Archives of Medicine; from Gazette Médicale.

CARBOLIC ACID ENEMATA FOR SEAT-WORMS.—A German writer having reported a case of poisoning from an enema containing one-half per cent. carbolic acid, Mr. J. Sidney Pearse writes to the British Medical Journal (June 7) to say that he has used this remedy in over a hundred cases without bad result, and has found it much more efficacious in the removal of ascaris vermicularis than injections of iron, quassia, lime-water, etc.

Unpleasant symptoms sometimes follow, lasting perhaps an hour, but usually much less. Six ounces of the one-fortieth or onesixtieth solution are commonly used. Within two minutes the patient complains of giddiness, singing in the ears, clammy skin, and taste of the acid in the mouth. There has been occasional abdominal pain, and, in one or two instances, confusion of ideas for the next twenty-four hours. In no case has any sign of collapse followed. There is a tendency to constipation for a day or two, which may be obviated by the administration of a saline draught. Adult males alone have been

experimented upon.

MILK DIET IN HEART DISEASE.—M. Sée, in his book on the treatment and diagnosis of heart disease, regards milk as a most powerful diuretic. He does not approve of exclusive milk diet, which, in his opinion, reduces the patient to a state of extreme inanition, but prescribes a mixed milk diet of about two litres and a half of milk per diem added to the patient's usual food. This does not in the least interfere with the diuretic effects of These effects must not be attributed merely to the water contained in the milk, as has been supposed by some authors, because the same quantity of pure water would in no wise produce the same results. It is evident, therefore, that only the sugar and salts possess the diuretic properties, their action being similar to that produced by salts of potash and soda by their osmotic power. These diuretic properties seem to be much more powerful when the milk has not been boiled. It should therefore be taken unboiled, and fresh from the cow if possible, or, at least, lukewarm, as cold milk does not act in the same way. It seems as if boiling the milk destroyed these properties; nevertheless, it must never be forgotten that some patients can only digest milk when boiled, so that the rule is not without exception.

Another curious point in the action of milk is that it is equally powerful in cases where the cardiac affection is not combined with dropsy. M. Sée has often observed that patients who either no longer suffered from dropsy, or never had suffered from it, were extremely benefited by a mixed milk diet. The action of the heart became much calmer and more regular, and the palpitations disappeared altogether. M. Sée entirely disapproves of whey and grape cures for patients with heart disease.—London Medical Record,

May 15, 1879.

INHALATION OF EUCALYPTUS OIL. — Dr. Mosler, of Greifswald (Berliner Klin. Wochenschrift, No. 21), strongly recommends oil of the leaves of eucalyptus, administered by inhalation, as a remedy for pharyngeal diphtheria. The strongest dose which he has given was according to the following formula: oil of eucalyptus leaves, 5 grammes; rectified spirit, 75 grammes; distilled water, 170 grammes; to be shaken together and used for ten inhalations. In this dose the medicine was inhaled four times daily, for ten or fifteen minutes each time, by a patient suffering from bronchitis and chronic laryngitis; it produced no troublesome effect, but acted as

a powerful expectorant. Another formula employed by him was: oil of eucalyptus leaves, 2 grammes; rectified spirit, 20 grammes; distilled water, 180 grammes; for ten inhalations. This was given with the best effect in a case of croupous pneumonia in the stage of defervescence, with residual infiltration of the right upper and middle lobes. It was inhaled four times without any bad effect. A still weaker preparation (1.5 of eucalyptus oil, 15 of spirit of wine, and 200 of water) has been used by him in several cases of nasal and pharyngeal catarrh, and also in a case of acute pharyngitis accompanied by slight lar-yngitis, with good effect. Dr. Mosler is engaged in further researches on the action of inhalation of eucalyptus oil in affections of the respiratory organs. - British Medical Fournal.

ARTIFICIAL CATAPLASM, A SUBSTITUTE FOR ORDINARY LINSEED-MEAL POULTICE.—Volkhausen prepares cataplasms consisting of a piece of white thick felt paper which is saturated with a decoction of linseed. When intended to be used, the paper is dipped into hot water, swells considerably, is then applied, covered with caoutchouc paper, fastened with bandages or string, and allowed to remain for twelve hours before a new one needs to be applied.—Am. Journal of Pharmacy; from Pharm. Ztg., February 12, 1879, p. 95.

The Sphygmophone.—Dr. Richardson has

THE SPHYGMOPHONE.—Dr. Richardson has invented an apparatus which he calls the sphygmophone, by which he transmutes the movements of the pulse into loud telephonic sounds. The sounds can be heard by an audience of several hundred people. By extending the telephonic wires, a physician in his office might listen to the heart or pulse of a patient lying in bed a mile or two away. The sounds yielded by the natural pulse are said to resemble the two words "bother it."—Lancet.

CHAULMOOGRA OIL is highly recommended in scrofula of children. The dose is six to fifteen drops to adults, three times daily, a short time after meals. The dose for infants is from two to three drops. The oil is best administered in cod-liver oil, or, when this cannot be taken, in glycerin or milk. It should at the same time be applied externally. Spices should not be eaten, but a fatty diet is recommended.—British Medical Fournal.

CHLORIDE OF BARIUM IN ANEURISM.—A correspondent of the *British Medical Journal* (August 2) says that he has treated a case of abdominal aneurism, at the unpromising age of 63, with one-fifth to two-fifths grain doses of chloride of barium, with great success, after failure of five months' rigid adherence to absolute rest and Tufnell's diet. The case was seen by several other physicians, who all coincided in the diagnosis, and the reliability of the improvement has been verified by two of them.

#### MISCELLANY.

A New Use for Supernumerary Fingers AND TOES. - These members have hitherto been lopped off without any one dreaming that they might be useful to science; but recently, at a meeting of the London Epidemiological Society, Dr. Cory described certain experiments made by vaccinating supernumerary fingers and toes, and then cutting these off at the end of a number of days, varying in different cases. Revaccination was practised a couple of months afterwards, with the result of showing, apparently, the imperfect protection afforded by vaccination when the vesicles are removed before their full ma-turity. The new vaccination seemed to begin at the stage where the old vaccination had been cut off.

"A STOMACH LIKE AN OSTRICH." - M. Alfred Ebelot says that the dwellers on the pampas of South America eagerly collect the pepsin of ostriches and sell it for its weight in gold "to restore worn-out stomachs," ostrich pepsin could be introduced into the market, it would undoubtedly be in great demand. At dinner this preparation might be handed around with the cheese, and the gourmet could attack his pâté de foie gras with a light heart, saying, with the hearty old gentleman in *Punch*, "Doesn't agree with you? Bah! I never heard of such a thing. Why, I just eat what I please and drink what I please, and then go to bed and let them fight it out among themselves."

THE Board of Pharmacy of the City and County of New York announces the organization, under its control, of an office for the examination and verification of weights and measures of precision. For a small fee any pharmacist may have his weights examined and verified, the stamp of the Board being placed upon them, so that no one may have occasion to doubt their accuracy. It is stated that a large proportion of the cheaper weights

in the market are utterly worthless.

A NEW medical journal is about to be issued from the press of Hirschwald, in Berlin, to be entitled the Zeitschrift für Klinische Medicin. The scope of the journal will be about the same as that of Virchow's Archiv, with rather more attention to the connection between pathology and therapeutics. Profs. Frerichs and Leyden are the editors.

THE METRIC SYSTEM (REVISED).—One of the first essentials, if the metric system is to be introduced without undue sacrifice of life, is careful proof-reading. The Toledo Medical and Surgical Journal describes the ordinary nickel five-cent piece as a metre (39.369 inches) in diameter, -- in other words, about the size of a cart-wheel!

ENORMOUS CALCULUS .-- According to the Berliner Klinische Wochenschrift, an enormous calculus was lately exhibited by Dr. Langenbeck, of Berlin. He removed it after death from the bladder of a man who had suffered for many years from urethral stricture. Its weight was six hundred grammes (eighteen ounces). It almost filled the bladder. No foreign body was found as a nucleus. It was composed wholly of phosphatic layers.

GLYCERIN IN 1848 AND IN 1879. - Mr. Shoemaker, in an interesting account of the early manufacture of glycerin in this country, published in the American Journal of Pharmacy, says that he began selling it in 1848 at the rate of \$4.00 per lb. It can now be produced for 18 cents per lb. The chief demand, one is surprised to learn, comes from the brewers. It is estimated that over 40,000 pounds are drunk annually in beer in this country alone.

Hypodermic Injection of Aloin as a Purgative.—Fronmüller uses a solution of one part in twenty-five of very warm water, which produces an evacuation in six to four-

teen hours; rarely in two to three.

LEPROSY IN SPAIN.—We learn from a correspondent of the New York Medical Record that, so far from having disappeared or nearly so, leprosy is, in Spain, rather on the increase.

At the recent commencement of Brown University the honorary degree of LL.D. was conferred upon Dr. Isaac Ray of this city.

#### OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY FROM AUGUST 10 TO AUGUST 23,

RIN, GLOVER, LIEUTENANT-COLONEL AND SURGEON, Medical Director of the Department.—Granted leave of absence for one month on Surgeon's certificate of disability. S. O. 160, Department of the Missouri, August 20, 1879.

Forwood, W. H., Major and Surgeon, McPherson Barracks, Atlanta, Ga.—Granted leave of absence for one month, with permission to apply for two months' extension. S. O. 128, Department of the South, August 23,

HORTON, S. M., MAJOR AND SURGEON. — Granted leave of absence for two months. S. O. 42, Division of the Atlantic, August 12, 1879.

GIRARD, J. B., CAPTAIN AND ASSISTANT-SURGEON, Fort Davis, Texas.—Granted leave of absence for one month on Surgeon's certificate of disability, with permission to leave the limits of the Department. S. O. 168, Department of Texas, August 8, 1879.

MOFFATT, P., CAPTAIN AND ASSISTANT SURGEON.—Assigned to duty at the new post in the vicinity of Lake Chelan (W. T.), to which post he will proceed at the end of the current month. S. O. 96, Department of the Columbia, July 28, 1879.

Banister, J. M., First-Lieutenant and Assistant-Sur-Geon.—Having reported in person at these Headquar-ters, to report to the Commanding Officer, Fort Leaven-worth, Kansas, for temporary duty. S. O. 151, Depart-ment of the Missouri, August 7, 1879.

CARTER, W. F., FIRST-LIEUTENANT AND ASSISTANT-SUR-GEON.—Now at San Antonio, to proceed to Fort Concho, Texas, and report to the Commanding Officer, District of the Pecos, for duty in that District. S. O. 164, De-partment of Texas, August 4, 1879.

FITZGERALD, J. A., CAPTAIN AND ASSISTANT-SURGEON.— Died at Columbia, Pa., August 11, 1879.

# PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, SEPTEMBER 13, 1879.

#### ORIGINAL LECTURES.

CLINICAL LECTURE

ON ORGANIC DISEASE OF THE HEART, COMPLICATED WITH BRIGHT'S DISEASE.

Delivered at Bellevue Hospital, New York.

BY PROF. AUSTIN FLINT, SR.

Reported for the Philadelphia Medical Times.

ENTLEMEN,—Of this case I have a very slight knowledge; but what little I do know of it is sufficient to induce me to believe that it will be of interest to investigate it further in the presence of the class. The patient, whose name is Jane M., is 32 years of age, single, and a seamstress by occupation. She was admitted to the hospital five days ago. Her mother died of some cardiac trouble at the age of forty-five, and she also lost a brother from a similar affection; while a sister is at the present time suffering from an attack of acute articular rheumatism. It was when she was twelve years old that she herself was first affected with the latter disease, and, from the account which she gives of this illness, it seems altogether probable that there was the complication of pericarditis present. Since then she has had two other attacks of rheumatism; the first occurring when she was eighteen years of age, and the second when she was twenty-one. About two years ago she was troubled for the first time with hæmoptysis, and six months ago she had a recurrence of this difficulty. Lately, she has had a third attack of it, and it was on account of this that she sought admission to the hospital.

When she first came here she was in considerable alarm on account of the hemorrhage, and she was suffering from very marked palpitation of the heart. From the fact that there is such a history as the above, we very naturally direct our attention first to the condition of that organ; and on making an examination of it, we find that the apex is carried down to an abnormal extent, although not much to the left, and that there are two distinct heart-murmurs, one at the base and the other at the apex. The first of these is direct and systolic, and constitutes what is known as a direct aortic murmur, its

greatest intensity being found in the second intercostal space on the right side near the sternum. The second is one of the kind which is called indifferently a mitral direct, a mitral presystolic, or a mitral obstructive murmur, and is heard with the greatest intensity at the apex. Connected with this there is also a sensation of thrill.

From the notes, I learn that there is in addition a slight phthisical affection in this case; but for this we shall have to take the house-physician's word, as I have not time at present to make a careful examination of the whole chest. Furthermore, there is distinct renal trouble present, since the urine is found to contain albumen and tube-casts; although, so far as can be ascertained, there has never as yet been any cedema.

But to return to a consideration of the heart. The heredity is a point of great interest here, and you will understand, I trust, that the reason why various members of this patient's family have been troubled with cardiac disease is because acute articular rheumatism has been hereditary with them. Let us now examine the physical signs a little more minutely; and I need hardly impress upon you that the utmost familiarity with the various signs met with in health and disease, both in the lungs and heart, is indispensable if you wish to make any practical use of the knowledge which you acquire here. In the first place, we decide that there is enlargement of the heart because (1) the apex is in the sixth intercostal space (although. as we have seen, it is not moved outward much), and (2) because the superficial area of cardiac dulness is increased. amount of the enlargement is moderate here. The apex-beat is of good strength, but it is not abnormally marked. On listening carefully with the stethoscope to the apex-murmur, we find that it is rough in character, and that it occurs after the second sound and is suddenly arrested by the first sound of the heart. As there is no aortic regurgitation in connection with it, a mitral obstruction is thus indicated. and this is here of the kind which is commonly met with, giving rise to the "button-hole" aperture. The basic murmur, on the other hand, is found to be soft and blowing in character, and to be conducted upward into the carotid arteries. It is, as

has been said, systolic, and therefore accompanies and follows the first sound of the heart. Now, will the condition giving rise to these murmurs cause much trouble? No; only a certain amount of inconvenience. One of the points of most importance about such a case as this is to ascertain whether there is any immediate danger, and here we can safely say that there is not. This judgment is not based at all upon the murmurs present; and as a rule it may be stated that the louder a murmur is, the less serious is the lesion occasioning it apt to be. The great thing to ascertain is, What is the condition of the heart as a muscular structure? and as long as it is acting regularly and well we need feel no fear for the patient. effects of valvular lesions are indirect, and we see in them compensatory provisions of nature. It is when the heart's muscular power becomes enfeebled that the danger begins. The proper criteria by which to judge of the actual condition of the patient and to form an opinion in regard to the future in any given case are, not the murmurs that may be present, but the character of the impulse and the heart-sounds. long as these remain right, it makes no difference whether the patient has one murmur or four.

If it is really true that phthisis exists in this case, as diagnosticated by the housephysician, it forms an exception to the general rule; for, ordinarily, we do not find this where there is cardiac disease. Still, we must not forget that in actual practice, both private and hospital, it is much more frequent to meet with two or more distinct affections in the same individual than a student would be apt to imagine from his reading. Thus, in the present instance there can be no doubt that there is at least a renal complication, and it is not unlikely that this may render the prognosis considerably more grave than it would otherwise be.

In the treatment of valvular disease of the heart, we pay no attention whatever to the murmur or murmurs that may be present, but take into consideration principally the invigoration of the general health of the patient. As long as this continues good, there will only be a certain amount of inconvenience experienced at times; and over and over again have I seen individuals who were in a fair general condition tolerate the presence of valvular lesions and

enlarged heart in the most admirable manner, and for long periods of time. As soon, however, as the constitutional vigor becomes impaired, the cardiac affection begins to give rise to troubles that were unknown before. From what has now been said of the present case, we should not be surprised to find that the condition of the lungs and kidney might so far interfere with the improvement of the state of the blood as to render the prognosis quite unfavorable here; but still, notwithstanding the presence of the complications mentioned, it is quite possible that we may be able to sustain the patient's strength for a considerable time, at least, in such a manner that the cardiac disease present will give her but little trouble. Of course, further study and observation of the case are required in order that any very definite opinion to the prognosis may be formed; and in the mean while our aim will be to improve the general condition by means of iron and other appropriate tonics, and the use of the most nutritious diet, of which milk should form a prominent constituent.

# PLEURITIC EFFUSION IN CONNECTION WITH PHTHISIS.

The next case which I introduce will be found to be a very simple one; but I scarcely think that it is the less deserving of attention on that account. I fear that sometimes medical students, on account of the ambition of their instructors to exhibit and dilate upon the rarer forms of disease, are better prepared to diagnosticate and treat certain cases which are but very seldom encountered in practice than they are to deal with the commoner ones, which all physicians are liable to meet at any time. This patient, whose name is Bertha F., and who is 20 years of age, is suffering from simple pleurisy with effusion; but the point of most importance about the case is, that there is reason to fear that in connection with this there is present a more serious affection of the chest. In the first place, the family history is very significant. young girl is an orphan, and she informs us that both her parents died of phthisis, her father at the age of thirty-two, and her mother at the age of twenty-four. In addition, we learn that a brother and an uncle have also died of the same disease. She has always been somewhat delicate, she says, but enjoyed pretty good health up to three years ago, when she began to

suffer from a short, hacking cough. In the course of a few months afterwards she had some hæmatemesis. She is quite confident that she vomited the blood that came up, and says that it was not mixed with froth. In this connection, however, I should not neglect to put you on your guard against making a mistake. Sometimes when blood is expelled very rapidly from the air-tubes it has no frothy appearance whatever, and hence the physician. unless his attention has been especially directed to this point, may be misled, and imagine that it has come from the stomach Therefore we must not attach too much importance in any given case to the fact that the blood is not frothy; but whenever we find that this is the case, we should not neglect to inquire if it came up very rapidly. Then, again, we must remember that sometimes the blood coming from the lungs is swallowed and afterwards vomited by the patient.

After a time the girl had a slight attack of pleurisy, and about eighteen months ago she was obliged to give up her regular work. Six months ago she began to suffer from cold sweats, and her cough became more troublesome, and accompanied by more expectoration. Since then she has continued to lose flesh and grow weaker, and she has suffered from more or less pain about the neck and arms. She entered the hospital just a month ago, and since coming in has remained about the same as regards flesh and strength, though her cough has improved, and she has had considerably

less pain. It is scarcely necessary to go into the physical signs very minutely here, but I think I can readily demonstrate to you the presence of a considerable amount of pleuritic effusion. When a comparison is made between the percussion-note of the two sides of the chest over the upper part of the lung in front, you will notice that on the right side we get a vesiculo-tympanitic resonance,—that is, a resonance of greater intensity than is normally found, which is to some extent vesicular and to some extent tympanitic in character, and the pitch of which is raised in proportion to the tympanitic quality present. This, you will remember, is the rule where percussion is made over the upper part of the lung in any case where there is an effusion which only partially fills the chest. Here, on the other hand, in percussion over the lower

part of the right lung, there is complete flatness; and it is found, moreover, that the upper border of this flatness is a horizontal line. Finally, it can be easily demonstrated that this line of flatness alters with the position of the patient,—whether she is sitting or standing upright, or is in a reclining posture. Here, then, is abundant evidence of the presence of liquid in the pleural cavity; and, in addition, we have the characteristic changes in the voicesounds; impaired or abolished vocal resonance, with absence of vocal fremitus. below the level of the fluid. As is apt to be the case where there is pleuritic effusion on one side of the chest, the various signs are somewhat exaggerated as regards the healthy lung on the opposite side.

Up to the present time I have not read the carefully prepared history of this patient's case recorded in the hospital books: but from what we have now learned concerning it. I think there can be little doubt. that she has been suffering for some time past from pulmonary phthisis, and that the present attack of pleurisy is secondary, being dependent upon the disease in the lung. In the first place we note that there has been the strongest possible hereditary predisposition to phthisis here, since both the mother and father, as well as other relatives, have died from it. Then there has been, for a considerable time, a cough, of a dry, hacking character, which has more recently been accompanied with expectoration, while during the last few months the well-known symptoms of hectic have supervened. The occurrence of pleurisy in such a case as this is really a point in evidence of phthisis; but we often meet with instances where the matter is not so plain, and the existence of phthisis cannot be made out so easily. Under the circumstances (on account of the presence of the pleuritic effusion), it is impossible to obtain the ordinary physical signs of the disease, and we are obliged to depend a great deal upon the history, which may be by no means as straightforward as in the present instance. Where there is some doubt about the correct diagnosis, the presence of moist râles about the level of the upper border of flatness, however, will have considerable significance as probably indicating the co-existence of phthisis.

ACUTE DESQUAMATIVE NEPHRITIS.

We have next a case of different character. This little patient, whose name is

Kate C., and who is 13 years of age, was admitted to the hospital six days ago. The history states that her mother died of phthisis. She enjoyed good health up to five days before her admission, when she began to suffer from general malaise, with considerable dizziness of the head. three days from the time that she first began to feel unwell there occurred a complete stoppage in her water, which lasted from the morning of one day until the afternoon of the following, or about thirtysix hours. At the same time she began to suffer from pain, headache, and vomiting. On the day after she again began to pass urine she was brought here, and at the time of her admission the temperature was 100°. The urine was found to be highcolored, acid in reaction, of a specific gravity of 1032, slightly albuminous, and also containing hyaline casts. There was no cedema of the feet or other portions of the body. We judge, therefore, from these characters, that the stoppage of water above spoken of must have been due to suppression, rather than retention. of urine. Among other measures resorted to in the way of treatment was dry cupping, and we find now, six days after admission, that the urine is passed freely, and that it is pale in color and of a specific gravity of 1015, while it contains no casts whatever.

At present, therefore, the patient is practically well. But now let us inquire what has been the matter with her. This attack, which I learn (although this is not stated in the notes) came on after exposure to wet and cold, was in all probability one of acute desquamative nephritis, acute tubular nephritis, or acute albuminuria, as the affection is indiscriminately called. It is the form of nephritis which occurs as a sequela of scarlet fever, and which rarely results in permanent disease of the kidneys. When not following scarlet fever, it is ordinarily due to exposure, as in the present instance; and hence those given to intoxication are peculiarly liable to it. patient presents an exception to the general rule in the fact that no cedema has been present in her case; and this is one of the points of interest about it. quently there is a very considerable amount of general dropsy in connection with the disorder. In cases like the present, where there is no cedema (especially in private practice), there is often no examination of the urine made whatever; and consequently the diagnosis that is given is incorrect. The symptoms, instead of being attributed to their true source, are placed to the account of "malaria," or some other trouble. I would put you on your guard, therefore, against neglecting to make an examination of the urine, even in cases where there is nothing to direct your attention especially to the kidneys.

As regards these cases of acute nephritis, there is not infrequently a certain amount of danger to the patient, from the accumulation of urea in the system. Only to-day I have seen a little girl suffering from acute albuminuria as the result of scarlatina, in whom there is almost complete suppression of urine. In the twenty-four hours previous to my visit she had passed only two ounces of water, and even this was a somewhat larger quantity than she had passed in the preceding twenty-four hours. The symptoms are still comparatively insignificant, so that one would hardly suppose that there was much cause for alarm; and vet the child is in imminent danger, for unless the kidneys resume their secretory functions more perfectly we shall have uræmic poisoning and death resulting. In all such cases the two points of vital importance in connection with the proper elimination of urea from the system are, the quantity and the specific gravity of the urine; and I should like to impress this as strongly upon your minds as is in my power. I may also remark here that the attack of scarlatina preceding the albuminuria (as is frequently the case) was a very mild one, and that in that case, as in the one now before you, there has been no accompanying œdema.

### ORIGINAL COMMUNICATIONS.

PHENOL (CARBOLIC ACID),\* ITS POISONOUS EFFECTS, AND THE SOLUBLE SULPHATES AS ANTIDOTES.

BY DAVID CERNA, M.D., PH.D.

THIS peculiar substance is obtained from coal-tar by distillation. It is the hydrate of phenyl, its formula being  $C_6H_6O$ . When pure, it occurs in long, rhomboidal needles, or in colorless, trans-

<sup>\*</sup> Abstract of the "George B. Wood" prize essay, 1879, read before the Society of the Alumni of the Auxiliary Department of Medicine, University of Pennsylvania.

parent crystals or plates. Carbolic acid has a corrosive, hot taste, and a very peculiar smell, which resembles the odor of creasote. At a temperature of 95° F. it melts into an oily liquid; at 370° it boils and is entirely volatilized. Phenyl alcohol, or phenic acid, as it is sometimes also called. is an inflammable substance, neutral to test-paper; it is very soluble in alcohol. ether, glycerin, acetic acid, and the oils, both volatile and fixed; it is slightly soluble in water. It is distinguished from creasote by its powers of coagulating collodion, and by its being converted into picric acid when acted upon by nitric acid. Again, it does not influence a ray of polarized light, while creasote twists it to the Carbolic acid is certainly a very poisonous substance when taken into the animal economy, and the numerous cases which have been recorded in the annals of toxicology attest this.

Symptoms. — Many eminent authorities state that the action of carbolic acid upon all vertebrates, with few exceptions, is the According to Dr. E. Labbée, \* Salkowski,† and a previous investigator (Dr. Neumann),‡ the frog easily succumbs to the influence of this poison. When a lethal dose is given to the batrachian a marked paralysis follows, which, curiously enough, invariably affects the hind limbs first, gradually extending to the front ones and to the rest of the body; convulsions then (though not always) appear, which are clonic or tetanic, and are certainly of a reflex nature, as they are easily excited by external irritation, as by physical or chemical stimuli, or even a current of air; sometimes a mere motion of the table on which the animal lies paralyzed will cause these convulsions. These effects I have repeatedly observed. Kempster§ says that in the rat carbolic acid causes at first great muscular weakness, followed by violent convulsions and stupor. I made a large series of experiments on rabbits and dogs, and the results obtained in the latter were similar to those obtained in the former. The symptoms produced in the rabbit are as follows:

Immediately after a large dose of the agent is administered, muscular tremors show themselves all over the body; suddenly the animal falls on his side paralvzed, kicks violently into mid-air, while the respiration is labored. For several hours the rabbit lies in this condition. convulsions frequently appearing in the interval, and the animal finally succumbs through failure of the heart's action. It may be mentioned, also, that in this animal phenic acid often produces salivation and an intense conjunctivitis.

In the dog the symptoms are also very striking. Here the poison was administered hypodermically and through the rectum, and, in order that the experiments might not be interfered with by a local irritant action, I used a very weak solution in distilled water. On this animal the effects produced are the following:

When a lethal dose is given, muscular tremors, which I think are quite characteristic, appear almost immediately. a few minutes the animal begins to stagger, and then falls to the ground in a paralytic condition; while in this state a very peculiar tremor of the jaws is observed, -i.e., a shutting and opening of the mouth, which occurs in every case; salivation takes place, and convulsions sometimes appear, followed by (in the course of a few hours) dyspnœa and death. Vomiting was sometimes seen, and marked cutaneous anæsthesia was also observed often.

The symptoms as they occur in man are almost the same as those produced in the lower animals. When a person swallows a large dose of phenic acid, a burning sensation is produced, extending from the mouth to the stomach, and, generally, several minutes elapse before other serious symptoms manifest themselves. The skin becomes bedewed with a clammy sweat; pain exists in the region of the stomach; nausea follows; and vomiting sometimes occurs. The stupor that takes place may deepen into insensibility and even collapse; the ears, the eyelids, the lips, appear livid; froth often shows itself at the mouth; while the pupils are contracted and insensible to light. The respiration is very much interfered with, the movements appearing hurried and shallow, and they may even be suspended at intervals in many cases; the pulse, though feeble, is generally very frequent, although in a case reported | it has been reduced to from

<sup>\*</sup> Archives Générales, 6e sér., t. xviii. p. 451, 1871. † Pflüger's Archiv, Bd. v., 1872. ‡ Archiv für Dermatol. und Syphilog., Jahrgang i. p. 425,

American Journal of the Medical Sciences, July, 1868.

<sup>|</sup> Medical Times and Gazette, April, 1871.

forty to fifty per minute. Sometimes the victim dies in a very few moments, as in the case mentioned by Dr. Taylor, U.S.N. (Philadelphia Medical Times, vol. ii. p. 284): a man took about an ounce of the poison; within ten seconds after the ingestion of the fatal dose he fell unconscious; in two minutes he was totally so; his respirations then were exceedingly labored, irregular, and distant, his pulse was gone, and in one minute later he was dead. But usually the patient sinks gradually, and many hours may elapse (generally from one to ten or more) before the last spark of life is extinguished. A case is reported\* where the patient lived for sixty hours after one and a half ounces of the acid were taken.

Fatal Dose.—The minimum fatal dose in man is as yet unknown. Half an ounce of carbolic acid has been known to cause death in a healthy man; † but even from one to two tablespoonfuls have proved fatal, in fifty minutes, in an adult person. To find out how much of the acid would prove fatal to rabbits and dogs, I made several experiments. I was careful to weigh the animals beforehand, and then introduce a weak solution of the poison subcutaneously and through the rectum; in both these methods I obtained similar results. The following examples, in the rabbit, I here give in detail:

Experiment 1. - Rabbit. Weight 2 lbs. Received four minims of carbolic acid hypodermically at 11.45 A.M. No action whatever

was exhibited.

Experiment 2. - Rabbit. Weight 2 lbs. 3 oz. Injected, subcutaneously, six minims at 9.45 A.M. 9.49, very marked muscular tremors appear, which last until 10.33. No deleterious effects, however, were produced, and the animal eventually recovered.

Experiment 3.—Rabbit. Weight 2 lbs. 2 oz. Animal received, hypodermically, onehalf a drachm at 10.15 A.M. 10.20, muscular tremblings now occur all over the body. 10.45, animal loses all power of voluntary movements; convulsions are present. 12.20 P.M., tremors still present; intense conjunctivitis, salivation; respiration somewhat labored. The animal lingers in this way until death, which took place at 2.15 P.M.

Experiment 4.—Rabbit. Weight 2 lbs.

1½ oz. Injected, at 11.25 A.M., one-fourth of a drachm, subcutaneously. 11.33, muscular tremblings appear, which continue for half an hour; but no other symptoms were pro-

duced, and the animal recovered.

Experiment 5 .- Rabbit. Weight 2 lbs. 2 oz. At 2.35 P.M. administered one-half a drachm of carbolic acid. 2.40 P.M., the characteristic tremors appear, and the results were similar to those of Experiment 3.

Experiments 6 and 7 gave identical results.

Seeing, therefore, that one-half a drachm, or thirty minims (not less), proved fatal to a rabbit weighing two pounds two ounces, we conclude that the minimum lethal dose in these animals is fourteen and one-eighth minims per pound.

The dog appears to be more susceptible to this poison than the rabbit, as the fol-

lowing experiments seem to prove:

Experiment 8.—Dog. Weight 4 lbs.  $5\frac{1}{2}$  oz. At 11.55 A.M. injected one drachm. Died with all the symptoms of carbolic acid poisoning at 12.59 P.M.

Experiment 9.—Dog. Weight 14 lbs. Exhibited through the rectum one ounce of carbolic acid at 9.55 A.M. 9.57, muscular tremors begin to show themselves all over the body. 10, paralysis, apparently; salivation. 10.30, slight purging. 1.15 P.M., the animal is well again.

Experiment 10.- Dog. Same weight as last. Injection, hypodermically, of one and a half ounces. Results similar to last were

obtained. Animal recovered.

Experiment 11.—Dog. Weight 7 lbs. Gave, subcutaneously, at 10.15 A.M., one drachm. 10.20, the tremors begin to appear all over the body. 10.50, tremblings more marked, especially the motion of the mouth already referred to; salivation occurs. 10.55, the dog is completely paralyzed, and the tremors continue until death, which took place at 12.35

Experiment 12.- Dog. Weight 9 lbs. Administered, at 9.45 A.M., one drachm, through the rectum. Identical results were observed,

but the animal eventually recovered.

Experiment 13.—Dog. Weight 14 lbs. 2 oz.
Injected into the rectum one drachm at 1.16 P.M. No other symptoms were produced than

mere muscular tremors.

Experiment 14. - Dog. Weight 14 lbs. Gave, through rectum, one and a half drachms of carbolic acid at 10.30 A.M. 10.32, the regular tremors begin, accompanied with salivation. 10.40, purging; 11.25, vomiting occurs. Eventually the animal recovered.

Experiment 15.—Dog. Weight the same as the last. To this I administered two drachms, through the rectum, at II.IO A.M. The symptoms here produced were identical with those obtained in Experiment 11. The

animal died at 1.42 P.M.

Experiment 16.—Dog. Weight 20 lbs. 2 oz. Injected into rectum two drachms of carbolic acid at 12.5 P.M. Almost immediately the characteristic muscular tremors appear, but no fatal issue occurred subsequently.

<sup>\*</sup> Sydenham Year-Book, p. 446, 1871–72. † Philadelphia Med. and Surg. Reporter, January, 1870. ‡ Husemann's Jahresbericht, p. 523, 1872.

It takes no less than two drachms to kill a dog weighing fourteen pounds, and therefore we conclude here that the minimum fatal dose in these animals is eight and four-sevenths minims of carbolic acid per pound.

ANTIDOTES TO PHENOL

In looking over the literature of the subject, I find that up to within a few vears little had been done towards discovering some antidote to this poison.

As recently as 1871, Dr. Husemann\* recommended as a good antidote to phenic acid a very strong solution of saccharate of calcium; although other alkalies, provided they are given in very large doses, may be substituted for the calcium salt.

A fact insisted upon by Baumann and Herter, † not mentioned before, is that pari passu with the action of phenic acid the salts of H<sub>2</sub>SO, disappear from the urinary secretion, and when the poisonous symptoms attain their height in intensity, not a trace of such salts can be discovered in the urine; while, at the same time, the amount of associated H2SO4 is increased to a very large extent. Again, according to Baumann, when a sulphate (for instance, that of sodium) is administered to an animal under the influence of carbolic acid, a chemical change takes place, which results in the production of phenol-sulphuric acid,—an innocuous substance. He therefore concludes that any soluble sulphate is a direct chemical antidote to the poison under consideration. Sonnenberg arrives at the same conclusion with regard to the antidotal powers of the sulphates. He made several trials on men, and found that the symptoms of poisoning by carbolic acid disappeared very quickly when the sodium salt was given. In cases of its local application in surgical practice, Sonnenberg found that when the urine became dark-colored (certainly a marked symptom of the effects of phenic acid), if the administration of sodium sulphate is resorted to, this salt exerts a powerful influence in restraining the further outbreak of poisonous symptoms, and that it is possible to continue the dressing, unless there is a great individual susceptibility to carbolic

Such information, obtained from such excellent authorities, induced me to repeat

the experiments of Baumann. I made a long series of observations, and the results obtained are very satisfactory, and fully corroborate those of the investigator referred to. For these experiments I used both rabbits and dogs, administering the poison and the antidote both by the rectum and subcutaneously. The principal salt used in my observations was the sulphate of magnesium. I only record a few of the experiments. First, those on the rabbit, as follows:

Experiment 17. - Rabbit. At 9.55 A.M. injected, subcutaneously, one-half a drachm of carbolic acid; immediately twelve grains of mag. sulph. were administered. 10.30, no symptoms are observed whatever, the rabbit appearing as lively as ever. 4.30 P.M., the animal does not as yet exhibit any evidence of the action of the poison given. The rabbit eventually recovered, and was used again for another experiment. I forgot to state that the animal used weighed 2 lbs. 2 oz.

Experiment 18.—Weight 1 lb. 3 oz. At I P.M. administered, hypodermically, fifteen minims of phenic acid, followed by the introduction of eight grains of the sulphate. No evil effects were produced. In a future trial the same rabbit succumbed to the same dose

when no salt was given.

Experiment 19.—Rabbit. Weight 2 lbs. 3½ oz. Injected, subcutaneously, thirty-five minims of the poison at 9.40 A.M. No sulphate was given. 9.47, muscular tremors began to appear. 11.15, convulsions, not marked, occur. 11.35, ten grains of the sulphate were given. 1.15 P.M., tremblings much less marked. 5.30, animal appears very much better; tremors feeble and rare; paralysis begins to disappear. 5.35, injected five grains of the salt. 6.25, the animal is able to jump around. 8.15, all the symptoms of carbolic acid poisoning have disappeared entirely, the animal exhibiting a marked tendency to get well. 10 P.M., the rabbit goes into a swoon, apparently, but, after remaining in this condition for a few minutes. it suddenly gets up, jumps forward, and dies in a convulsion at 10.15. This experiment is very instructive. It shows that when the animal was completely under the poisonous influence of carbolic acid, the administration of the sulphate of magnesium proved efficient in checking and totally abolishing (for the time at least) all the symptoms of the deleterious agent which, in a few minutes longer after the ingestion of the poison, would, without the influence of the salt, have certainly proved fatal. Had the administration of the sulphate been continued, there is every probability that the acid would have met with a powerful and victorious foe, and the animal would doubtless have completely recovered.

Experiment 20.—Rabbit. Weight 2 lbs. 5

<sup>\*</sup> Neues Jahresb, für Pharm. † Zeitschrift für Phys. Chemie, i. ‡ Medical Times and Gazette, vol. ii., τ878.

oz. Injected, at 11.10 A.M., thirty-five minims of carbolic acid, followed by a dose of twelve grains of the sulphate. 11.15, slight tremors show themselves; 11.30, the salt was repeated in a five-grain dose; 2 P.M., no bad symptoms as yet developed. The rabbit eventually recovered, and was afterwards used again. The same animal died when the same dose was given to it unaccompanied by the salt.

I made also some experiments in which the sodium sulphate was used as the antagonist, and similar results were obtained. We see, therefore, that the sulphates, in the rabbit, possess antidotal powers against carbolic acid.

In the dog the results which ensued were identical, except that in the case of this animal larger doses, proportionately, of the sulphate had to be ingested to counteract fully the action of the acid. both agents were given under the skin and through the rectum. The following are examples:

Experiment 21.—Dog. Weight 8 lbs. Injected, hypodermically, one and a half drachms of carbolic acid at 10 A.M., followed by the administration of twenty-four grains of magnesium sulphate. 10.45, the animal vomits. 11, tremors are present and continue for two hours, the dog vomiting at intervals. At 1.30 P.M. twelve more grains of the salt. 3.30, all symptoms have disappeared, and the animal is perfectly well. The same dose, when no sulphate was given, killed the same dog afterwards.

Experiment 22. — Dog. Weight 12 lbs. Gave, through the rectum, one and a half drachms of carbolic acid at 9.35 A.M., and, five minutes later, ingested twenty grains of the sulphate. 9.47, slight tremors appear, and the animal shows evidences of weakness. 10, tremors quite marked, the animal apparently unable to hold the erect position, for he attempts to get up, but invariably falls to one side or the other. 10.10, seemingly paralyzed; tremors continue; salivation. Twenty more grains of the salt are given. 10.25, animal is very quiet; 11.49, all the symptoms have gone, and the animal is well again. The same animal succumbed to the poison when given in the same quantity and without the magnesium salt.

Experiments 23, 24, 25, and 26 gave similar results.

The above experiments seem to prove that in the dog also the sulphates possess powers antidotal to carbolic acid. question now arises, Is this antagonistic power of the sulphates, in relation to phenic acid, a chemical or a physiological one? Practically, it does not matter to

the physician what the character of the antidote is, whether the one or the other; but certainly it is of some interest, from a scientific point of view, to know the true nature of the action of the sulphates in regard to the poison in question.

As mentioned previously, Baumann has stated that when any soluble sulphate is exhibited to an animal suffering from carbolic acid poisoning, a new, or rather a third, substance is formed in the economy, as a result of the combination of these two agents, which substance is harmless. mann does not appear to have proved this, however, but supposes this to be the explanation of the antagonistic powers of

the sulphates.

Wishing to satisfy myself of this matter, I proceeded immediately to investigate the subject in the chemical laboratory of the medical department of the University. I made several solutions of the sulphate of magnesium and of the acid, and then combined them in different proportions, allowing the mixed solutions to evaporate spontaneously, my object being to obtain the sulpho-carbolate of magnesium, and afterwards to investigate the physiological properties of this new substance. baths were also resorted to for evaporation of the solutions referred to. Combinations were also made of very concentrated solutions of magnesium sulphate and pure liquid phenic acid itself, allowing such to evaporate spontaneously or enhance the process by the aid of hot baths. Certainly chemistry hever fails; my experiments, however, did so, for in no instance did I obtain, in these procedures, the sulphocarbolate. From this, therefore, I am inclined to disbelieve the statement of Baumann, that such a substance is formed in the animal economy when the sulphates and carbolic acid are both circulating there, for, if such was the case, similar results, in all probability, could be obtained in the chemical laboratory, employing the methods I have mentioned. The subject (at least this part of it) is still under investigation, and I propose to publish, at a future time, the results of my observations, when I shall have had time to investigate it more fully. The chemical investigations above described were made under the supervision of Dr. Griffith E. Abbot, former Demonstrator of Chemistry in this University, to whom I tender my thanks for his valuable assistance.

The conclusions at which I have arrived,

thus far, are the following:

I. The minimum fatal dose in the rabbit is fourteen and one-eighth minims of phenol per pound of the animal.

II. In the dog the minimum fatal dose is eight and four-sevenths minims of the

poison per pound.

III. The soluble sulphates, acting in some manner as yet undetermined, form the most valuable antidotes to phenol thus far ascertained.

University of Pennsylvania, Medical Department.

#### MEMORANDA OF A CASE OF RUBE-OLA IMMEDIATELY FOLLOWING SCARLATINA.

BY S. J. RADCLIFFE, M.D., Washington, D. C.

A PRIL 4 last I was called to see the child of J. C. F., aged 21/2 years. I found him suffering from well-marked scarlet fever; eruption over the body and extremities bright and characteristic; fever high, throat inflamed and swollen, tongue red and exhibiting well the peculiar elevated papillæ of scarlet fever. Child very fretful and restless, and quite sick. The disease progressed favorably up to the beginning of the third week. All the symptoms had subsided, desquamation was going on, and convalescence seemed to be setting in. Suddenly he had suppression of urine, with drowsiness. His mother said he had passed only a tablespoonful of urine in twenty-four hours, and desired to sleep all the time. These symptoms passed away satisfactorily in a few days, leaving him seemingly no worse off than before. On the third day of my visits another child, aged 10 years, in an adjoining room, broke out with measles. Eruption perfect and general. He had had some febrile and catarrhal symptoms for a few days previously, and we supposed we had another case of scarlet fever. He required very little treatment, and in a short time was convalescent. At the end of the third week the first child became sick again. Considerable fever developed, with irritable cough and malaise, and it was thought or apprehended he had relapsed, or some unfavorable sequela was about to show itself. To my surprise he broke out all over, face and all, with the eruption of measles, the larvngo-tracheal irritation and

cough being very distressing. The measles went through the usual phases, convalescence was soon re-established, and he got apparently perfectly well without the least trace of either disease remaining. The other boy did not take scarlet fever, nor did either of the other children, and only one of the others took measles, and this one, aged four years, was sick at a friend's house, where she had been sent for protection from scarlet fever. Perfect isolation and ventilation were enjoined, and, as far as could be, strictly carried out.

#### NOTES OF HOSPITAL PRACTICE.

# EYE CLINIC, JEFFERSON MEDICAL COLLEGE HOSPITAL.

ADVANCEMENT OF THE INTERNAL RECTUS—
TWO OPERATIONS.

Reported by William S. Little, A.M., M.D., Chief of the Clinic.

M AY 19, 1876, a girl, æt. 13 years, came under observation, presenting a wide divergent strabismus of the right eye. She was compelled to hold her head at an angle of 45° to the left, at the same time turning the left eye towards the inner canthus, in order to obtain effective and comfortable vision.

She stated that when four years of age she had a convergent strabismus, it being due to an inflammation of the cornea following an attack of measles in her babyhood. At this age she was operated upon, both internal recti being divided. Gradually a divergent squint developed, leaving her in the condition stated.

An examination showed an irregular depression in the cornea of the right eye; no opacity, but a loss of substance, and this most marked at an angle of 135°; the centre of the cornea was involved.

The strabismus in the right eye was very marked, the limbus of the cornea reaching to the external canthus, and the internal rectus had no power of moving the eye inward: to compensate for this, movement of the head to the left and turning the left eye inwards was necessary.

R. E., V = counts fingers at three feet. Field of vision limited to upper and outer portion of retina; amblyopic.

L. E.,  $V = \frac{20}{XX}$ .

Dr. William Thomson, before the class, divided the external rectus and advanced

the internal rectus of the right eye, leaving the eyes in a normal position, and

with head held straight.

No refractive study was made at this time, and only a cosmetic effect was sought. Patient made two or three subsequent visits, and was not seen again till April 5, 1879, three years later.

During this interval, slowly, a divergent strabismus re-established itself, - not so marked as before, being 4": her head was held at an angle of 33° instead of 45°, and the left eye still turned in. Acuity and field of vision the same as before.

She desired another operation, but before attempting it I decided to correct the ametropia existing, for the loss of substance in the cornea had produced astigmatism in that eye, and the left eye was found to be defective also. I had done the same in a similar case, reported by me in the Philadelphia Medical Times, August 3, 1878, and where a permanent result was obtained.

R.E., atropia,  $V = \frac{5}{C}$ ; astigmatic test clear,

 $+2.d \bigcirc +3.d \text{ cyl. axis } 40^{\circ}, V = \frac{5}{XI}$ .

L.E., atropia, 
$$V = \frac{20}{LXX}$$
.  
 $+1.5$ od  $\bigcirc$   $+0.5$ od cyl. axis 90°,  $V = \frac{20}{LX}$ .

The glasses being made, on March 28, 1878, Dr. William Thomson, before the class, performed again the operation for advancement of the internal rectus.

The operation was difficult, on account of the adhesions existing and atrophied condition of the tissues from the former operation. The tendon of the internal rectus was gone, and the fibres of the muscle were few; the suture was tied to the conjunctival flap at the edge of the cornea instead of to the tendon. After operation a convergence of 3" was present; little reaction followed, and sutures were removed on the sixth day. The eye remained straight; head in position. The glasses were worn the day after operation.

June 28, 1879, I tested the vision of the right eye, and found it had improved  $V = \frac{20}{C}$ . Field of vision increasing.

L. E., 
$$V = \frac{20}{XX}$$
.

She holds her head straight, her vision being made good, and without effort be-yond what is natural, by the glasses she required. A return of the cosmetic defect is unlooked for.

#### TRANSLATIONS.

MENSTRUATION. - Osterloh gives the following statistics derived from the Lying-in Institution in Dresden. In 3188 women menstruation began at 16½. Country girls began to menstruate later than city girls. Blondes menstruated earlier than brunettes (Tewesses were not examined). In 236 women who suffered from rachitis in childhood the year of first menstruation was 171/4. Of 3212 women, 2074 (64.45) per cent.) presented a regular periodicity. In 15 of these the menses occurred biweekly, in 263 tri-weekly, in 7 every three and a half weeks, in 1783 every four weeks, in 2 every five weeks. In 277 (8.63 per cent.) the occurrence was irregular, with intervals from a few weeks to a year. The duration in 2080 cases was one to five days, in 637 over five days, in 297 variable; 232 women experienced prodromal signs, 909 accompanying symptoms, particularly pain in the loins, abdomen, and head. Osterloh concludes as the result of his investigations that menstruation tends to great irregularity.—Berliner Klin. Wochens.; from Jahresb. der Gesellsch. f. Nat. u. Heilk. in Dresden, 1877-78.

PILOCARPINE IN PUERPERAL ECLAMPSIA. —Dr. Braun reports the case of a primipara, 21 years of age, who was seized with convulsions about an hour after the safe and easy delivery of a living healthy child. These recurred at intervals of four hours, stupor existing in the intervals. Morphia and chloral were prescribed. Twenty-four hours later he saw the patient again. had had ten severe seizures and numerous slight attacks in the mean time. She was perfectly insensible; the pupils were enlarged and immovable. No urine had been passed; the bladder was empty. Breathing rattling; there was marked cyanosis. With the idea that puerperal eclampsia is dependent upon uræmic poisoning, it occurred to Braun that a powerful sudorific, which, by its abstraction of water, might reduce the blood-pressure throughout the system, and which also might remove some of the toxic matters from the blood by its excretion of urates, would be useful. With this object he injected 0.03 centigr. (1/2) grain) chloride of pilocarpine subcutaneously. A profuse secretion of saliva and sweat was the result. The convulsions quickly diminished, and from that moment the patient began to amend, and finally

made a good recovery. Braun concludes that chloride of pilocarpine, in the dose of 0.02 to 0.03 centigr. (1/3 to 1/2 grain), causes, as Prof. Leyden has said, with absolute certainty a profuse secretion of saliva and sweat. It likewise appears to give rise to a copious serous secretion along the entire digestive tract, but has no effect upon the urinary secretion.—Berliner Klin.

Wochens., 1879, No. 24, p. 358.

HÜTER'S THEORY OF SCOLIOSIS CRITI-CISED.—Dr. Dornbluth, in accordance with the anatomical facts of H. Meyer and Volkmann's doctrine, opposes energetically the assertions of Hüter (Klinik der Gelenkrankheiten). The latter, as is known, asserts a primitive asymmetrical development of the thorax, and considers all scolioses, lumbar and cervical as well as dorsal, as secondary conditions. "It is an error," says Hüter, "to believe that scoliosis begins by a curvature of the spinal column; it commences by a greater projection of the angle of the ribs on one side, and always on the convex side corresponding to the vertical curvature." Dornbluth objects to this, asserting that cases of primitive lumbar scoliosis and of total unilateral scoliosis give the negative to Hüter's statement. After criticising Hüter's views in extenso, Dornbluth concludes as follows. I. The projections which are observed near the convex side of the vertebral column are produced, not by change in form and volume of these sides, but by a rotation of the vertebræ inherent in all vertebral curvatures, for they are found as well near the abdominal vertebræ as the thoracic. 2. The prominence of the costal angles is due to deviation of the vertebræ, as well as to displacement and sinking in of the ribs which follow. 3. The hypothesis of a primitive deformity of the ribs has no foundation. The displacement and deformity of the vertebræ by pressure due to asymmetric development of the thorax are physically impossible. 4. The form of the scoliotic vertebral column, of its parts, and of the thorax, is explained by the unequal division of the weight of the body (ungleichen Belastung), just as in analogous changes in other articulations. - Gaz. Hebdom. de Montpellier, July 12; 1879; from Virchow's Archiv.

CHRONIC ULCERS OF THE ANTERIOR AND POSTERIOR COMMISSURES OF THE VAGINA. -K. Schröder describes a number of cases of this affection, which has hitherto not found a place in literature. Ulceration in the neighborhood of the external opening of the urethra and in the fossa navicularis is usually—probably even invariably—the result of venereal disease; it is stubborn and persistent, very difficult to cure, and shows an extraordinary tendency to relapse. Schröder describes the affection as of traumatic origin, usually occurring in vaginæ which are abnormally advanced and sometimes lying upon the symphysis pubis. Here the penis not infrequently penetrates the urethral orifice. Probably soft chancres occur in some cases, but as a rule syphilis is the cause of these ulcera-In the anterior commissure the urethral mucous membrane may ulcerate primarily. Most frequently this is the case when chancres develop in this locality, or when severe inflammatory swelling, with prolapse of the hypertrophied urethral mucous membrane, occurs, with gradually deepening ulceration, which divides this membrane from the subjacent tissues. the more advanced forms the opening of the urethra is distorted, the urethral caruncle hangs in the entrance to the vagina, and a large ulcerated surface is found between the clitoris and the urethral opening. Stricture of the urethra occasionally occurs; more usually, however, a finger can be introduced. In the posterior commissure the ulceration begins in front of the hymen or the caruncles, penetrates deeply into the tissues, and forms in the perineum a ragged excavation, which may reach or even penetrate the rectal walls. The symptoms of this affection are not striking or severe: rest and cleanliness are very important. When destruction of the urethra has taken place, Schröder operates for a new one. Recto-vestibular fistulæ make the prognosis unfavorable.—Cbl. f. Med., 1879, p. 413; from Charité Annalen, iv., s. 347.

DIGITALIN.—M. Cadiat, as the result of certain experiments, described at a meeting of the Académie des Sciences, concludes that digitalin, given to animals in toxic doses, operates as a poison to the heart. It acts directly upon this organ, causing, as has been frequently noted by various authors, a tetanization of the ventricle and a diastole of the auricle. has no action on the nervous centres, on the peripheric nerves, or on the muscles. -Bull. Gén. de Thérap., 1879, t. xcvi. p.

# PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, SEPTEMBER 13, 1879.

#### EDITORIAL.

NOT SO BAD AFTER ALL.

117E hear so much of adulteration nowadays that we are apt to take pessimistic views of the morals of trade, and to believe not only "that whatever is is wrong," but that whatever is made is bad. To believe the paragraphs which are affoat in the papers, the unhappy citizen sits down with his family to a breakfast-table groaning with factitious articles of food and fabricated beverages. His bread, which is chiefly made of ground plaster of Paris, is spread with an oleaginous "butterine." manufactured from the slime of the polluted river which furnishes the sparkling goblet of soluble typhoid poison with which he quenches his thirst under the name of water. If he shuns the toxic fluid and drinks coffee, the berries are ingeniously-stamped bits of wood or cracked date-seeds, if nothing worse. If he takes tea, the chance is that it is a mild decoction of blackberry leaves. His sugar is sanded; his "cream" a mere simulacrum of the lacteous fluid. Each day some new fraud is devised to cheat him with inert or poisonous articles of diet.

But a gleam of light has been shed on this gloomy prospect by the appearance of the report on Food and Drugs recently issued in England by the Commissioners of Inland Revenue. From an abstract of this report, by Prof. Henry Morton, published in *The Plumber and Sanitary Engineer*, it appears that some twelve thousand samples of food were examined during the past year, most of which turned out to be pure and as represented. A sample of gin suspected of undue watering was found quite strong enough for practical purposes.

A sample of pepper was alleged to be adulterated with sand, but the quantity which was found was not more than may be found in pepper in the whole state, as imported. No fewer than seventy-one samples of genuine milk were found derived from dairies in and about London. In Ireland no small excitement was caused at Ballyshannon Fair, in consequence, it may be believed, of the absence of "fun" as a result of the imbibition of the whisky sold there. Careful examination, however, showed this spirit to be quite genuine, with the exception, in one of the samples, of "traces of a certain pungent matter resembling Cavenne pepper." Cigars suspected of containing opium were found, on careful analysis, quite free from that drug. Tobacco, indeed, was frequently adulterated, but with nothing more deleterious than sugar. The cases of adulteration of beer which came under notice during the year were comparatively few.

That this must be cheering news to the English adulterophobist need hardly be said. But may not we on this side of the Atlantic take courage? It is hardly to be supposed that a free and independent people would deliberately give itself up to adulteration of food, -unless there was money in it. And, really, perhaps this tendency to adulterate which is inherent in the mercantile nature is, here in America, finding a harmless effervescence and outlet in the manufacture of canned and potted meats, codfish-balls, fried mush, etc. We can imagine that the invention and concoction of some of these patent foods may give a twang of what Mrs. Malaprop would call "adulterous pleasure" to minds so disposed, without really doing any one harm.

SALICYLIC ACID AS AN AID TO DIGESTION.

—Kolbe, well known in connection with the introduction of salicylic acid into medical use, employs it habitually in his own case for dyspepsia. He takes a grain (gramme?) a day habitually, while almost all the beer and wine he drinks is salicylated.

### CORRESPONDENCE.

#### LONDON LETTER.

THE great medical event of the last month has been the annual meeting of the British Medical Association, which held its fortyseventh meeting at Cork. This is its second visit to Ireland, having met in Dublin in 1867, under the presidency of the late illustrious Dr. Stokes. This year Dr. Falconer, of Bath, retired in favor of Dr. O'Conor, of Cork, the Professor of Medicine in Queen's College, Cork, and the senior medical officer of the hospital. It was a successful gathering, and numerously attended, considering the position of Cork, one of the attractions being the locality and the excursions which terminate the meeting. The first general meeting was held on the Tuesday evening, when, among other things, it was announced that the council had awarded to Surgeon-Major James Henry Reynolds, of the Army Service Department, the Gold Medal of the Association for "distinguished merit," in consequence of the gallant manner in which he behaved at the fight of Rorke's Drift, in Zulu Land. A surgeon, as a non-combatant officer, is left out in the cold when others are decorated for bravery; consequently the Association has founded a medal for merit. Beyond this there was nothing but the ordinary proceedings, -the usual laudation of each other by certain elderly members of the Association, which has become wearisome from repetition, the more that there is a wide-spread suspicion that the progress of the Association has rather been retarded and thwarted by them than aided. But on such a subject perhaps it is kindly not to investigate too curiously.

The profession in the United States was represented worthily by Drs. Lewis Sayre, Sr. and Jr., Loring, and Beard, of New York; Dr. Turnbull, of Philadelphia; Dr. Byford, of Chicago; Dr. Palmer, of Michigan; and Dr. L. Yandell, of Louisville. The financial position of the Association is very satisfactory, in spite of the heavy disbursements of last year, consequent upon the change of premises in London. The address in Medicine was delivered by Dr. Hudson, Professor of Physic in the University of Dublin. He chose as the subject of his discourse "Laennec: his Labors and their Influence in Medicine." Familiar with disease in his own person, Laennec was remarkable for incessant toil. He commenced his medical life as a pupil of Corvisart's, in La Charité, where he labored assiduously. Here it was that he invented the stethoscope and discovered the advantages of mediate auscultation, which has done so much to clear up our views as to intrathoracic disease. Yet at the time the announcement was received with chill incredulity or scornful ridicule. Three years after his work had been translated into English,

Sir John Forbes wrote that not once in the English army had the stethoscope been used. "The new light was too strong for older eyes," says Dr. Hudson. The stethoscope made as of Avenbrugger. C. J. B. Williams studied under Laennec; Stokes, Corrigan, and others drank in his teaching; and gradually physical examination of the chest made its way. until there seem solid grounds for holding that its sway now is somewhat tyrannous. Laennec himself never undervalued a proper consideration of the rational symptoms in his enthusiasm,—a fact which young physicians, in their zeal, would do well to remember. Curiously, Laennec seems not to have recognized the friction-sound of an inflamed serous membrane. As to his treatment, he bled freely and gave tartar emetic, after the fashion of his time. Yet he comprehended the value of paracentesis, and laid down rules for its performance, advocating early operation.

After giving a history of the various views held by pathologists as to the nature of tu-bercle and the relations of pathological in-vestigation to clinical medicine, Dr. Hudson quoted the late Mr. Buckle, the historian, to the effect that "the philosophic pathologist is as different from a physician as a jurist from an advocate, or an agricultural chemist from a farmer. The two sets of functions may be united, and occasionally, though very rarely, they are, but there is no necessity for their being so." This expression of opinion is also worthy of the attention of the young men of the present day, who are apt to view disease too exclusively from the dead-horse point of view. Laennec observed that fatty degeneration of the heart was not a mere inflammatory process, as had been thought, in its chronic as well as in its acute forms; while he recognized its association with severe fever. and perceived the necessity for wine and tonics in its treatment in convalescence. He recognized the fact that digitalis was of no benefit in hypertrophy of the heart, — a piece of knowledge not yet shared by all the members of the profession. Laennec distinguished the difference betwixt fatty degeneration of the muscular fibre of the heart and fatty infiltration between the muscular bundles, and also the coexistence of softening and hypertrophy, to which I have given the name of "failing hypertrophy," adopted by Dr. Hudson.

He closed his oration with the assertion that the Language was that the standard the standard that th

He closed his oration with the assertion that to Laennec we owe that careful bedside examination of our patients which is simply invaluable.

The address in Surgery was delivered by William Savory, F.R.S., Surgeon to St. Bartholomew's Hospital, who chose for his subject "The Prevention of Blood-Poisoning in the Practice of Surgery." As to the term "blood-poisoning," he said, "I shall employ it in its comprehensive sense,—viz., to express the sum of the effects produced by the intro-

duction of matter changed by the action of septic poison into the blood. By septic poison I understand matter capable of producing or promoting putrefaction." He did not include under this head specific poison, like that of scarlatina or measles. What the nature of such poison - whether organisms or not - he did not stay to inquire. He maintained that we have no knowledge that these mischievous particles ever originate within the blood. If these particles existed to the extent which some supporters of the germ theory assert, then how could exposed wounds heal kindly, as they not rarely do? He holds that to work mischief these particles must find their way into the blood, and that the fine animal membrane termed "granulation tissue" prevents this in many cases. Consequently there was risk in new wounds where this tissue had not had time to be developed, or in wounds which are unhealthy in character or flagging in action. The mischief is less likely to happen in proportion as the wound Thorough is healthy and repair is rapid. cleanliness, in the surgical sense as well as in and beyond the common-sense interpretation of the term, is, then, absolutely essential to the well-being and safety of the patient. Change in the character of the pus of a wound is fraught with danger. As long as the pus is healthy, all is well; when it becomes foul or putrescent, then danger is afoot. Once it was held that all danger arose from within; then came the view of the danger coming from without. He says, "Then, when the truth began to dawn that the actual poison was derived from without, the pendulum of opinion, as is its wont, swung at once to the opposite extreme, and I venture to think that of late the opposite error has prevailed, of regarding only the conditions under which the poison is formed, and losing sight altogether of the conditions under which it affects the blood." After insistence upon thorough cleanliness, he goes on to say, "Perhaps an instance hardly ever occurs now, in the treatment of a wound, in which an antiseptic of some kind is not in some way employed during its progress; never, perhaps, in what should be called civilized surgery, if we allow, as we should allow, free ablution with clean water, adequately used, to be among the simplest, safest, best of anti-septics." Further, "It cannot be doubted that the occurrence of blood-poisoning during the progress of wounds and recovery after operations has been of late far less common than formerly, and is, I venture to say, daily becoming yet more rare." Much of this he thinks due to the generous and emulous rivalry of surgeons to procure the best results and to attain a minimum death rate, since the still waters of surgery have been stirred by the introduction of the modern angel, "Antiseptics," by Prof. Lister. The most scrupulous care is now devoted to the dress-

ing of wounds, no matter what plan of treatment be adopted. A further good result of this rivalry has been to draw attention to the state of health of the patient before the operation. And he says, "Never, when we have choice and opportunity, do we inflict an injury without previous inquiry in this direction very fully carried out." He then proceeded to describe how he personally would treat a wound, such as an amputation of the thigh or an excision of the breast, according to the principles he had laid down; but there is nothing in this to deserve full quotation, for nothing less would be justi-fiable. He criticised severely the present fashionable resort to drainage-tubes. purpose for which they are employed is undoubtedly clear and sound enough, -viz., to avoid the accumulation of fluids in wounds. But he thought this end could often be attained by other means, such as seeing that there is an outlet at the most dependent point of a wound, and by the use of thin strips of gutta-percha or some threads of carbolized catgut. But, if possible, all these things should be avoided; they act as foreign bodies; "a drainage-tube is, in fact, a seton." says, "When I see, for example, a fatty tumor (small or of moderate size) removed from under the skin, and then the edges of the wound stitched closely together over a drainage-tube lodged throughout its length, it seems to me simply idle to talk of principles of surgery. That such wounds do at length close, in spite of this treatment, I know, but I think I know also that they will heal more quickly and kindly directly without disturbance, if they are simply closed in the way to which I have already alluded. It is surely very rare indeed for such wounds, if thus naturally treated and duly watched, to give rise to any anxiety or trouble." He put in a word or two in favor of the "bread-poultice" when well made, -which he made bold to suspect some of his hearers had never seen,-as productive of much comfort to patients with wounds. The disrepute into which poultices have fallen he considered to be largely due to the reckless routine manner of their employment, the faulty method of their preparation, and the length of time during which they were allowed to remain unchanged. In foul discharges and unhealthy wounds, they formed a capital vehicle for the use of charcoal and other agents. He concluded by a criticism of Lister's special method of treating wounds, -not being a follower thereof, -in which he pointed out what further must be done in

hospitals beyond the Listerian plan.

The address in State Medicine was delivered by Dr. Andrew Fergus, of Glasgow, Crown Member for Scotland in the General Medical Council. He commenced by stating that for the prevention of disease we must adopt more largely the plan laid down by Moses,—the rigorous separation of the sick

from the healthy. He then referred to the treatment of lepers among the Jews, and, after that, by Christians in the Middle Ages. It appears a leper died in the eye of the law as soon as he became a leper, and the Church had a burial service which was read over the unfortunate being, after which he became virtually dead to this world. In the days of the plague the separation of the sick from the healthy was rigorously carried out. It appears that leprosy was not extinct in Scotland in the last century. He then proceeded to discuss what he termed "excremental pollu-tion diseases," and showed specimens of decayed soil-pipes, concluding by insisting that a minister of health should be appointed, and that the appointment be non-political,i.e., not removable with each change of government.

This year a new sub-section, on Dermatology, was opened by Prof. McCall Anderson, of Glasgow, who reviewed "The Progress of Dermatology during the Last Quarter-Century." He regretted the death of Tilbury Fox, who was the chairman originally chosen. He then alluded to the want of beds for skin diseases in the London hospitals, pointing out that in the Western Infirmary of Glasgow there were more beds for this purpose than in all the London hospitals put together, as well as an admirably-arranged set of baths of every kind. He pointed out how far Germany is ahead of Great Britain in its attention to diseases of the skin.

The address in Obstetric Medicine was delivered by Dr. Kidd, Master of the Coombe Lying-in Hospital, Dublin, who selected as his subject "The Treatment of Uterine Fibroids by Dilatation and the Ecraseur," in which he described the most modern appliances for the purpose. The address in Public Medicine was delivered by Dr. Grimshaw, of Dublin, who discussed the subject of "The Public Work of the British Medical Association," in which he pointed out how much the Association had achieved. In the Psychological Section, Dr. Eames, Superintendent of the Cork District Lunatic Asylum, discoursed on "The Importance of the Study of Psychology." He insisted on the introduction of a systematic study of insanity into the medical curriculum, as the approach of insanity is under the eye of the ordinary medical attendant, and not the alienist. Insanity, he insisted, is as much a bodily disease as gout or rheumatism, and should form as necessary a branch of study as lung- or heartdisease.

There were the usual reports of committees on various subjects, and discussions on several topics,—with what results I cannot yet say anything, as I was not there. On the Friday afternoon there was a garden-party, and on Saturday the excursions—the most attractive part of the proceedings—were carried out, amidst glorious weather, and gave

much satisfaction. Indeed, it seems that the Association week has been the finest, as regards the weather, the Cork people have experienced this bleak, chilly, rainy summer,—so called.

J. MILNER FOTHERGILL.

## PROCEEDINGS OF SOCIETIES.

AMERICAN DERMATOLOGICAL ASSOCIATION.

THIRD ANNUAL MEETING.

THE third annual meeting of the American Dermatological Association was held in New York, on August 26, 27, and 28.

New York, on August 26, 27, and 28. First Day.—After a brief private meeting for business, the doors were thrown open, and the President, Professor Louis A. Duhring, of Philadelphia, delivered his opening address, the subject being "The Progress of Dermatology in the United States." Beginning with a brief allusion to the first medical publications in this country, Professor Duhring sketched the earliest writings on dermatological subjects, alluding to the salient points in each, and now and then giving an abstract of the most important papers. The address, which was full of interest, and which developed many important facts in American medical history, was listened to with much pleasure by the Association, and will form an important part of the proceedings of this meeting.

Following the address by the President came a paper by Dr. I. E. Atkinson, of Baltimore, entitled "A Case of Incomplete Vitiligo," the patient being a mulatto woman, in whom the chromatic changes accompanying this disease displayed unusual symptoms and ran a peculiar course. Dr. James Nevins Hyde, of Chicago, then read a paper entitled "A Contribution to the Study of the Bullous Eruption induced by the Ingestion of Iodide of Potassium." At the afternoon session Dr. L. Duncan Bulkley, of New York, read an account of "Two Cases of Chancre of the Lip, probably acquired through Cigars." The discussion following the reading of this paper was full of interest. Dr. Sherwell, of Brooklyn, described the method of manufacturing cigars in Havana, where women of the lowest class are accustomed to roll the cigars on the inside of the naked thigh, in the course of which manufacture the cigar could easily come in contact with the secretions from the genitals, etc. Dr. Bulkley said he had been informed, by the head of a large cigar-manufactory, that, although machines were at hand for the purpose of finishing the rolling of the cigar, workmen would persist in using the saliva for this purpose. Several of the members objected to the title of Dr. Bulkley's paper, believing that the source of infection in the cases described had not been proved to be derived from an infected cigar. It was

suggested that the title of the paper should be amended so as to read possibly acquired

through cigars.

Dr. George H. Fox, of New York, read a paper entitled "The Treatment of Eczema and Ulcers of the Leg by an Elastic Tubular Bandage." He had frequently found, he said, that the "solid rubber bandage" of Martin, so far from doing good in eczema of the leg, frequently did actual harm. This occasional untoward result sometimes depended upon faulty manufacture, but very often upon the unequal pressure and cutting edges of the folds of rubber surrounding the limb. He had devised a thin, hollow tube of rubber, about twenty-five centimetres in length, with an average width, when flattened, of eight centimetres, and of varying thickness. This can be drawn over the naked limb, prepared only by dusting some finely-powdered starch over it. The tube reaches from the ankle nearly to the knee. It is unnecessary that the foot should be covered, unless the disease has invaded it also, in which case a longer tube may be employed, with an opening to cover the heel. He showed a tubular bandage in position. It had been worn for several days without the least discomfort; there was no tendency to undue sweating or to maceration of the epidermis.

The last communication of the day was in the form of a lecture, by Dr. Charles Heitzmann, of New York, entitled "Microscopical Studies on Inflammation of the Skin." This lecture, which was abundantly illustrated by numerous sketches thrown off by the speaker while addressing the Association, was a brilliant exposition of what might be called the transcendental pathological histology of the skin, and formed a continuation of the lecture delivered by him last year on the normal his-

tology of the tegumentary system.

Second Day. — After the usual business meeting, the public session of the Association opened with a paper by Dr. H. G. Piffard, of New York, on Viola tricolor. This plant, belonging to the pansy family, was long ago employed in Germany for the internal treatment of certain diseases of the skin, but has fallen into undeserved neglect. It grows wild in some parts of the United States, but not in sufficient quantities to gather. The domesticated plant is inert; we are dependent, therefore, on foreign sources for our supply. Dr. Piffard showed several specimens of the viola tricolor, together with the fluid extract derived from the plant. The dose of this is four or five drops, and he had used the preparation with marked success in one class of cases,—eczema capitis of children. The first effect, when given in the dose above mentioned, is to aggravate the disease, but after a few days amelioration takes place, and the case runs rapidly on to a successful issue. In the other forms of eczema, and particularly in eczema occurring in adults, viola tricolor has not proved of benefit. In the discussion which followed the reading of this paper, Dr. Heitzmann said that the remedy was an old one, and was one of many similar vegetable preparations which had formerly been much in vogue in Germany for the internal treatment of skin diseases, until the researches of Hebra proved that they were entirely inert and useless. Dr. Piffard had used external treatment in his cases, in connection with the administration of viola tricolor, and the good result was probably due not to the internal medicine, but to the outward applications.

medicine, but to the outward applications.

A paper followed, by Dr. Arthur Van Harlingen, of Philadelphia, entitled "A Case of Chronic Inflammatory Tuberculo-Vesicular Disease of the Skin," with illustrative microscopic sections of the lesions. The last paper of the morning was by Dr. Samuel Sherwell, of Brooklyn, on "The Tattooing of Cutaneous Nævi." Dr. Sherwell described the peculiar method devised by himself for performing the tattooing process, and showed an instru-ment which he had devised for the operation and had made for himself. This instrument consists simply of a half a dozen fine glovers' needles bound together in a bundle with waxed thread so that their points shall be one to two millimetres apart. This is used either alone or in connection with some irritating substance, as carbolic acid. Many sittings are required, and the operation is a painful one, but the results are very satisfactory in all cases of superficial or cutaneous nævi. Of course, when the nævus is of considerable size and deep, and is supplied by large sinuses, this method cannot be practised. At the conclusion of his paper, Dr. Sherwell brought before the Association a female patient upon whom he had operated by tattooing for the relief of a disfiguring nævus of the chin. The cure was not quite completed, but thus far the success was undoubted, and the result of the tattooing treatment could not fail to be

ultimately satisfactory.

Afternoon Session.—Dr. W. A. Hardaway, of St. Louis, read a paper giving an account of "A Case of Multiple Tumors of the Skin accompanied by Intense Pruritus." Dr. Duhring read a paper entitled "Supplement to a Case of Inflammatory Fungoid Neoplasm," being a continuation of the history of the case presented at the previous meeting of the Association. Considerable discussion followed the reading of this paper, Dr. Heitzmann maintaining it as a case which (microscopically at least) was essentially a sarcoma of the skin, undeserving of a separate name and a distinct place in nosology. Dr. Duhring, disclaiming any intention or desire to introduce a new title, yet maintained that the clinical peculiarities of the disease were such as to differentiate it from ordinary sarcomata, however much it might resemble these in its microscopic appearance. To call this affection nothing more than sarcoma would be to

introduce confusion instead of simplifying matters. The last paper of the afternoon was a minute and painstaking account by Dr. Jas. Nevins Hyde, of Chicago, of "A Variety of Molluscum Verrucosum presenting Unusual Features," illustrated by a finely-painted picture of the eruption when at its height.

Third Day.—The papers read at this the final session of the meeting were three in number. The first was by Prof. James C. White, of Boston, on "Etiology." The writer examined the various theories formerly, and perhaps still, prevalent regarding the dependence of diseases of the skin upon dyscrasia and upon diseases of the various organs, etc., and claimed for the skin the same independence with regard to the causation of disease which is allowed to other organs of the body. An animated discussion followed the reading of this paper. While all the speakers praised the skill and thoroughness with which Dr. White had disposed of the crude and theoretical views formerly prevalent, and still perhaps somewhat in vogue, by which skin diseases were regarded as the efforts of certain humors to break out of the body, or as the outward manifestations of some mysterious "diathesis;" yet much opposition was expressed to his views upon the independence of the skin of the diseases and ailments of the various internal organs. The paper of Dr. R. W. Taylor, of New York, "On the Nature of Syphilis," took the ground that certain minute protoplasmic albuminous bodies found in the serum of chancres and other lesions of early syphilis act as the carriers of contagion. This view was energetically combated by Dr. Heitzmann, who maintained that no proof of the existence of such vehicles of contagion could be brought forward. He thought Dr. Taylor's theories premature, and maintained that we are not yet in a position to make any statement as to the nature of the syphilitic poison, although certain investigations which he himself was conducting seemed to give the hope of ascertaining the truth with certainty in the course of time. The final paper of the session was by Dr. Hardaway, of St. Louis, entitled "Obliteration of Varicose Vessels in Rosacea by Electrolysis." Dr. Hardaway described the apparatus made use of by himself, consisting of a No. 13 cambric needle inserted to the depth of 1.5 to 2 millimetres into an opening first made in the dilated capillary, and connected with a battery of seven cells.

After a short discussion upon Dr. Hardaway's paper, the Association adjourned, to meet next year, in Newport, on the last Tucsday in August. The officers of the Association for the following year are, — President, Dr. Louis A. Duhring, of Philadelphia; Vice-Presidents, Drs. E. Wigglesworth, of Boston, and W. A. Hardaway, of St. Louis; Secretary, Dr. Arthur Van Harlingen, of Philadelphia; Treasurer, Dr. I. E. Atkinson, of Bal-

timore.

PHILADELPHIA COUNTY MEDICAL SO-CIETY.

A CONVERSATIONAL meeting of the Philadelphia County Medical Society was held at the hall of the College of Physicians, Philadelphia, May 28, 1879, Dr. John H. Packard, Vice-President of the Society, presiding. Dr. Edward T. Bruen presented a paper entitled

A NEW OBSERVATION IN PHYSICAL DIAGNOSIS.

I shall very briefly occupy the time of the Society this evening, and I feel an especial diffidence because I have been assigned the first place on the notice of the proceedings for the evening, instead of a few minutes at the close of a meeting.

I have, indeed, hesitated to designate as a paper the few remarks to which I desire to call your attention; but I trespass on your patience because I believe that it is always desirable that the members of the Society should contribute any special information they may possess to the common fund of knowledge, even though the addition be very trifling

Without further preface, therefore, let me say that I have many times been baffled in my investigations of interesting cases of pulmonary disease by the impossibility of deciding whether subcrepitant râles (especially those which occur at the posterior and lateral regions of the chest) were developed in the parenchyma of the lung or between the surfaces of the pleura.

I have, of course, considered the usual points which are suggested by writers on this subject,—viz., the superficial character of the sounds, their rubbing, moist, or dry quality, the character of the symptoms, etc., in the case of pleural friction-sounds; while, on the other hand, pulmonary râles are described as commonly more diffused, and moist, not so superficial, and, above all, they are dispersed or altered in quality by the act of coughing. To these signs I would now add another, which I have not read of, but which I have observed in a considerable number of cases in my wards in the Philadelphia Hospital, and which I have demonstrated at the bed-side to classes of students.

I have noticed that the severe pain accompanying pleurisy is very much modified by pressure applied by means of adhesive strips encircling the affected side of the chest,—a plan of treatment which has often been suggested. Indeed, the pain of coughing can be entirely prevented by the exercise of sufficient compression of the chest-walls. This effect, of course, is produced by limiting the movements of the chest-walls and the expansion of the affected lung; to a degree, it places the pleura in splints.

Now, if there be a doubt in reference to the location of a subcrepitant râle, whether in the lung or between the pleural surfaces, at the

base of the chest, if the observer will place a stethoscope over the suspected surface, and cause an assistant (the nurse) to stand on the opposite side of the patient, to pass the arms around the patient's body, locking the fingers, and then compress firmly the lower portion of the chest-wall, by this means the râles will be caused to disappear if they are generated by movements of the pleural surfaces, but if they have been developed in the pulmonary parenchyma they will persist unchanged.

The pressure exerted by the assistant is, doubtless, adequate to control the movements of the pleural surfaces, but not sufficient to prevent the passage of air through the bronchial tubes, thus accounting for the persistence of the subcrepitant râles of pulmonary etiology. This method of examination I have found will be available whenever suspected râles are confined to the lower half of the chest,—for example, below the third rib anteriorly. It will be recognized that it would be impossible to control the respiratory movements of the superior thoracic walls.

I could have specified in detail the history of the cases which I noted, but I have thought it unnecessary, as I only desired to call attention to a single feature.

On motion, a vote of thanks was passed complimenting Dr. Bruen upon his interesting communication.

No remarks being made on the paper, Dr. Charles S. Turnbull announced that he had an interesting case of a living filaria in the eye of a horse, which he would present to the Society, and which was now in attendance.

On motion, the Society had an intermission for five minutes to examine the horse.

Dr. Charles S. Turnbull then gave the following description of the case:

#### A LIVING FILARIA IN THE EYE OF A HORSE.

GENTLEMEN,—As all physicians are more or less interested in horses, I present this rare case, with which I have visited some of our most prominent veterinary surgeons, and concerning which I have consulted the best authorities on helminthology and hippo-physiology. [The horse was exhibited in the vestibule of the College of Physicians.]

This heavily-built dun horse, now 12 years of age, was raised and worked upon a farm near Rochester, N.Y. When illuminated, there can be seen through the partially-opaque cornea of his left eye a worm several inches in length. It is white in color, and, without the aid of any artificial means, can be distinctly seen floating, wriggling, and twisting about in the anterior chamber. The eye seems slightly irritated, as the horse occasionally endeavors to rub it, and the stimulus of reflected light causes some lachrymation. What is characteristic in such cases, at times only, is the hazy cornea and the cloudy aqueous humor. The horse appears perfectly healthy, is in excellent condition, and does

not seem to be particularly annoyed by the presence of this unusual guest. The iris is of a good color, the action of the pupil perfect, lens clear, and remainder of the eye free from irritation.

The horse was turned out early last spring a year (which was an unusually wet one), and about that time the worm, which was two inches in length, was first discovered. Since then it has grown several inches, and at this time looks like a piece of catgut from four to five inches in length. On account of its incessant motion, no details concerning the parasite's exact shape can be made out. As the present owner bought the horse for his eye, no one will be likely to have that satisfaction; but it is my intention to keep the case under observation, and any changes of interest concerning the fate of either horse or worm will be reported to this Society.

This variety of thread-worm is known as the *filaria papillosa Rudolphi*, and is described by Diesing in his "Systema Helminthum," vol. ii., Vienna, 1851.

The earliest account of this worm Diesing gives in his extensive bibliography, which goes back to the year 1645, when Spigelius, of Amsterdam, recorded a case of *filaria* in the vitreous humor of the eye of a horse. This case makes the third which has occurred in this country, and a fourth has been lately reported by Kipp, of Newark, N.J., who removed the parasite. The first case on record was exhibited in this city in the latter part of the last century, and was reported by the late Judge Francis Hopkinson\* in 1783; the second, by Dr. Th. N. Corbyn,† in 1833. Numerous interesting cases are referred to as having occurred in Great Britain, and a few in Europe, while the majority are sent by English veterinary surgeons in India to the Veterinarian, a standard English journal.

The haunts of this animal are said to be throughout the entire body of the horse, and Diesing enumerates them as follows: in the cavity of the abdomen; in the muscles and cellular tissue; in the intestines; between the dura and pia mater; in the vitreous body; in the anterior chamber; and, still more rarely, between the coats of the eye. In the ass and mule, in the abdomen and thorax. In the domestic cattle, in the abdomen; rarely in the anterior chamber.

Mr. Twining, a resident at Poonah, in India, for sixteen years averaged twenty cases annually,—more than fell to the lot of any other individual in Hindostan. The worm or worms (for there are sometimes two or three floating in the aqueous humor at the same time) by their presence cause symptoms of ophthalmia, with great intolerance of light. The worm, he says, is a species of filaria or thread-worm, called *filaria equi*.

Sir Everard Home informs us that filariæ

<sup>\*</sup> Transac. Amer. Philosoph. Society, 1st series, vol. ii. † Medical and Surgical Reporter, October 26, 1878.

equi are found in the blood of the horse, and they are supposed to be transmitted through that medium. Worms have been found in the cœliac artery of the ass, but of greater magnitude. Naturalists have discovered numerous genera and several species as inhabitants of the body of the horse, sheep, ox, hog, deer, etc.

The most succinct account of this phenomenon Sir Charles Percivall, V.S., published in the London *Veterinarian* for 1828. He says that in low, humid situations in India, where frogs are prevalent, or where there is stagnant water, especially after an unusually wet season, worm in the eye is a very common occurrence. It is also seen in other parts during the cold months, from the beginning of October to the latter part of February, and especially during the continuance of an east wind. The symptoms are those of a conjunctivitis; the cornea is obscured by a "nebulous effusion," the eyelids are closed, and there is intolerance of light.

The method of treatment is by puncturing the cornea at its upper and inner margin, and allowing the parasite to escape with the aqueous humor. This spot is selected for the operation because the cornea is here least dense, and because the aqueous humor, which gradually re-forms, will be least likely again to escape while the wound is healing. Beer's cataract knife was used to make the incision.

These worms find their way into the animal's body along with the water he drinks, either as fully-developed parasites or as ova. Both the parasites and eggs are found in the stagnant waters of India.

A fact of intense satisfaction to the lovers of horseflesh is, that in no case of operation for the removal of filaria has the function of the eye been more than temporarily disturbed.

My friend Dr. Charles J. Kipp, of Newark, N.J., exhibited, at a recent meeting of the New York Ophthalmological Society, a fine specimen of filaria which he had removed from the anterior chamber of the eye of a horse. The doctor subsequently published an account of the case in the New York Medical Record for February, 1879. The parasite, unfortunately, was not carefully preserved, and in consequence nothing definite was made out concerning its species, etc.

The Chairman invited a discussion of the

paper.
Dr. Harvey, of Chester, inquired whether the proper habitat of this worm is in the

marshes or in the body of the horse.

The lecturer replied that it had been found in all parts of the horse's body, especially in the connective tissue, and the entozoon had probably found its way into stagnant water, where it was imbibed by this horse, although not in its present form, as it was then in an intermediate stage of development. Both the parasites and eggs, says Twining, have been found in the stagnant waters of India. In

reply to Dr. George Hamilton, who asked what would be the termination of the case, he said that after the worm attained its full development it would probably die and shrivel up, as do trichinæ and cysticerci in the human being, but at any time previous there might be enough irritation set up to destroy the eye and allow the parasite to escape alive.

Dr. William T. Taylor inquired whether

Dr. William T. Taylor inquired whether this belonged to the same species as the hairworm found in the grasshopper, which the lecturer said was another variety of worm, which subsequently developed into the school-

boy's "horse-hair" worm.

Dr. Allis inquired whether the parasite caused any pain, and whether the sight was

lost in the eye.

Dr. Turnbull replied that the horse did not appear to have any pain, because there was no iritis, photophobia, or even lachrymation unless the eye was irritated. The sight is not entirely destroyed, for when the other eye is covered the horse can see to follow his master.

Dr. Thomas Rich asked whether the eye became clearer after a night's rest, to which the lecturer replied that it did, and that on some days it was clearer than others. When he first saw the horse the eye was perfectly clear; the cornea is now cloudy, but it is worse after the horse has been driven.

Dr. Eskridge asked how long the filaria

had existed in the eye.

Dr. Turnbull said that he first saw it about one year and a half ago, when the parasite was about two inches long. He believed that it had been accidentally discovered about two months previous to that time. It made its appearance several months after the horse had been out at pasture in a swampy field.

In reply to a question from Dr. Allis, he also said that the cloudiness was due to irritation of Descemet's membrane, and possibly some deposits of lymph were present that were absorbed while the horse rested at night, making the eye therefore clearer in the morning. The anterior layers of the cornea are not affected, except at the centre, where the intralamellar deposit seems to be on the increase. The worm coils up at night, when the eye is closed and at rest, and is in active motion only in the day or when the horse opens the eye to the light.

Dr. Harvey further inquired how ascarides were communicated, as he had seen several families where nearly all the members had

become infected.

Dr. Turnbull replied that the different individuals probably had been exposed to the same sources of infection, but not simply because they ate the same food and drank of the same water-supply. They were (so helminthologists say) communicated directly by actual contact of persons infested, from sleeping in the same beds,—that is, from one person to another, just as they travel from the rectum to the vagina,—as Professor Leidy

has seen living ascarides upon the sheets of children's beds.

Dr. Harvey said that these explanations were not applicable in his cases, and he thought that the ascaris could only live in moist places, and would die after being separated from the body. He was unable to give any explanation himself of cases where a child with seatworms comes into a family, and all the rest of the family, including adults, become affected.

Dr. J. E. Garretson, being called upon to describe a case of living cysticercus which he had successfully removed from the eye of a man about 45 years of age, stated that, with Dr. Wm. W. McClure, he was engaged in preparing a paper on the subject which would soon be published, and which would contain the full particulars and all that he knew about the case.

The thanks of the Society were given to Dr. Turnbull for his interesting communi-

cation.

PATHOLOGICAL SOCIETY OF PHILA-DELPHIA.

THURSDAY EVENING, MAY 8, 1879.

THE PRESIDENT, DR. H. LENOX HODGE, in the chair.

Orbital tumor removed by operation. Presented by Dr. John H: Packard.

MRS. D., æt. 67, subject of a tumor in the upper part of the right orbit, crowding the eyeball downward and forward. It seemed to have been due to a severe labor in 1847. The sight of the eye seemed to be unaffected, except by the pressure changing the shape of the ball.

It was removed March 30, by an incision parallel to and close below the eyebrow, enucleation being then easily accomplished

with the fingers and knife-handle,

No untoward symptom followed. The eyeball was easily retained in its normal position, and moved in concert with its fellow. Six weeks after the operation the deformity was very slight, and for her complete restoration

she only needed proper glasses.

Report of the Committee on Morbid Growths.

"The tumor presented by Dr. Packard, removed from the orbit, is found to consist, histologically, of a stroma composed of fibrillar connective tissue, the cells of which are, in many places, seen to be in an active state of proliferation. Traversing this stroma are observed transverse, oblique, and longitudinal sections of tubes possessing a lining of epithelial cells implanted upon a basement membrane. The blood-vessels are very distinct, having their walls increased in thickness by a development of fibrous tissue concentrically around them. Here and there through the section small cysts, containing a gelatinous tissue and lined with flattened cells,

are seen. These cysts very probably are the result of a dilatation of the above-described tubes, their orifices having become obstructed and their cells undergone mucoid metamorphosis. This development and arrangement of elements would indicate the new formation to be a growth of a fibrous nature, in connection with glandular structure,—from its location, possibly the lachrymal gland. It may be designated as an intercanalicular fibroma, some of the canals dilated into small cysts.

"May 22, 1879."

Intraocular tumor growing from the ciliary region. Presented by Dr. John B. Roberts.

The patient, aged 33 years, says that ten years ago she noticed pain and some impairment of vision in left eye, though she could read ordinary printing. This pain gradually increased, and the loss of vision became more marked. About six and a half years ago an oculist in a neighboring city advised enucleation on account of her having at that time severe pain, occurring in paroxysms. states that at this time she could only see objects that were situated below the horizontal plane of her eye, while the field was lost in other directions. One or two months subsequently the eye became blind, except that a bright light could be distinguished, and for two years past she has had no vision whatever in this eye. The general condition of the patient has been good, though she has occasionally been troubled with cardiac palpitation. There is no cancerous family history, but many of her immediate relatives have been phthisical. She stated that for a couple of months the pain in the eye had been severe, beginning to annoy her in the latter part of every second or third day. The severe pain began invariably in the afternoon, and lasted apparently during part of the night. She had been wearing for some years weak, convex, tinted spectacles.

On examination, the condition was found

to be as follows:

There was no vision, no paralysis of motion, except perhaps a slight insufficiency of the internal rectus on converging the axes, and the conjunctival vessels on the nasal side were engorged and tortuous. The cornea was perfectly transparent; the pupil was elliptical in shape, with the long axis directed upward and rather outward; behind the iris, on the nasal side, was seen a black mass, which extended across the pupil three-quarters of the diameter, and pushed the inner portion of the iris forward almost, if not entirely, in contact with the cornea. The portion of iris in front of the tumor appeared to be thinned. The part of the pupil which was not occluded by the tumor was occupied by a white membrane looking like the capsule of the lens. The ophthalmoscope showed that it was not possible to illuminate the fundus. The tension of the ball was apparently diminished. The right eye was said to be somewhat painful at times, but there was no apparent failure of accommodation, and no external evidence of inflammation of iris or cornea.

The organ was enucleated by Dr. R. I. Levis, in the ordinary way, on April 15, 1879, and placed in solution of chloral. Two days later I made a section of the globe, and found a soft growth, the size of a large hazel-nut, occupying the inner and anterior portion of the vitreous chamber. The vitreous humor was fluid and contained in the small space remaining outside and behind the tumor. The retina was opaque. The tumor had evidently arisen from the ciliary region, and was adherent to the whole circle of the ciliary body. so that the anterior portion of the eye was entirely shut off from the vitreous chamber. When the globe was turned inside out no point could be found where a probe could be passed alongside of the tumor into the anterior portion of the eye. The retina seemed to extend from the posterior part of the organ upon the surface of the tumor, as though the latter had pushed the retina up as it had been developed backward. Beneath this retinal investment the tumor was covered by pigment. Section of the cornea showed the lens to be pushed forward and externally by the growth; but it still remained behind the iris, and was not absorbed, as I supposed it to be when the eye was examined clinically. position of the growth reveals the cause of the utter impossibility of illuminating the fundus, and the history would seem to show that the tumor had its beginning at the upper and nasal part of the globe. There was no disease external to the globe, and the patient in a few days was able to return home. Doubtless in a short time she will wear an artificial eve.

Thus much for the clinical history and microscopic appearances of the growth; as to the microscopic characteristics, I must refer the Society to my friend Dr. Longstreth, who has kindly made a number of sections for the members to examine this evening. The long period of development, the absence of active inflammatory symptoms, and the non-involvement of adjacent structures would lead to the diagnosis of an innocent tumor; and the location would suggest a myomatous growth, were it not that this form of intraocular tumor is exceedingly rare. Sarcomata are known to occur occasionally in this region as primary growths, but are usually secondary to a similar growth originating from the choroid; but then it is common to find accompanying inflammatory changes. The fact that no sympathetic trouble of the other eye had been produced by the growth of the tumor in the ciliary region is undoubtedly a

point of some interest.Report of the Committee on Morbid Growths.—"A histological examination of the intra-

ocular tumor presented by Dr. Roberts shows an alveolar arrangement, the walls consisting of fusiform and stellate cells, the latter containing granules of blackish pigment; within the spaces formed by this reticulum are seen round or oval lymphoid cells. The bloodvessels are found to possess embryonic walls, and many are congested with blood. The new formation is an alveolar sarcoma, the stroma of which contains many pigmented stellate cells.

" May 22, 1879."

Myxosarcoma of inferior maxilla. Presented by Dr. M. Longstreth.

B. F. M., æt. 25, married, miner. Admitted to the Pennsylvania Hospital, January 7, 1879, under the care of Dr. R. J. Levis; discharged, well, January 24, 1879. His family and personal history were good. About eighteen months previous to admission he was kicked on the right side of the face by a mule. Shortly afterwards he noticed a small "white blister" on the gum of the outer side of the lower jaw. Subsequently an ulcer formed at this place, increased in size, and became painful. Later, the bone began to enlarge beneath the seat of the ulcer. Nine months before his admission to the hospital, the bone was scraped to remove the growth.

On admission, there was found a tumor growing from the inferior maxilla on its right side. It was moderately firm and resistant, and was covered by abundant granulations.

On January 8, Dr. Levis excised the portion of the bone involved in the growth. The specimen measures two and a half inches in length. The tumor springs upward from the alveolar process of the bone in a fungusmushroom manner, and projects also from the outer aspect of the jaw. On the inner surface of the bone the normal outline is preserved, but the periosteum is thickened and the bone is thinned to a mere shell, which gives little resistance to pressure. The tumor appears to have started from the sockets of the teeth, and has grown upwards above the level of the alveolar process about one inch; on the outer surface of the jaw it also projects an inch, and is there covered, in parts, by a very thin layer of bone and by the periosteum.

At the posterior part of the specimen the last molar tooth remains in position, with the tumor springing up around it. At both ends of the specimen the bone and the periosteum covering it appear normal. Forward from the molar tooth the alveolar process has been destroyed. The consistence of the tumor is firm and markedly elastic; its upper surface and borders are covered by mucous membrane, except at several points along the dental line, where ulceration has occurred.

On section, the whole substance of the growth is seen to be made up of a whitish-yellow, semi-transparent, gelatinoid-looking tissue; but its consistence is, however, pretty

firm, and there are seen bands of fibrous tissue, extending inward through its substance, at intervals, from the periosteum covering the tumor. There exudes a moderately thick, gluey fluid from the surface of the section, which can be drawn out in strings by the fingers.

Immediately after the operation microscopic sections (three-quarters of an inch by one-half inch) were made of the tumor, taken from the part projecting upward, and including its mucous membrane covering.

The examination of them shows the mucous membrane thinner than normal, and the papillæ to a great extent smoothed out by stretching of its tissue over the growing tumor. In parts the thickly-laminated epithelial layer of flattened cells is preserved; in others it is completely removed, leaving only the deeper (spinous or furrowed) cells,—those directly in contact with the basement membrane. The submucous tissue shows its fibrous and elastic trabeculæ considerably thickened and its interspaces filled, more or less completely, with small round cells, generally closely aggregated. The vascular supply of this part appears considerably increased, the arterial walls thickened, and an especial tendency for the cellular aggregations to occur around the vessels is visible.

From the inner surface of the submucous tissue many fibrous bands are seen penetrating the proper tissue of the tumor beneath it, thus confirming the naked-eye appearance previously noted. In the area of the tumor itself the sections show, in the first place, bands or tracts of spindle cells, closely laid together, and having the usual appearances, in respect to size, outline, nucleus, etc., of the cells found in the small spindle-cell sarcomata. The bands pursue different directions; some are seen cut parallel to the long axis of the spindle cells, some transversely, and others are divided at various angles of in-

clination.

Secondly are seen cells having the same figure as the others, which, instead of being closely laid together, are separated by clear spaces having frequently a width equal to several times the diameter of the nuclei of the cells. These cells, taken in groups, have their long axes generally placed in the same direction; but not invariably so, for occasionally a cell is seen laid transversely to the general direction. The cells are not parallel to each other; their tapering processes are contorted and intertwined, and often lie across the body of other cells. The nuclei of these cells were relatively large in proportion to the cell body, and they contained large granular nucleoli. At these parts of the specimen the cells appeared as though disrupted and disturbed from their former positions by an expanding force acting within the tumor. The clear spaces between the cells appeared to be made up of finely fibrillar tissue, occasionally

very finely granular, and at some parts containing small granular cells similar to those seen in the submucous connective tissue.

Thirdly, there were areas of the specimen showing cells, many of which resemble those last described; other cells were stellate, or multipolar, or with only one pole branched. In these portions of the specimen the cells were much more widely separated than in the preceding portion, and the cells did not seem to have any definite arrangement. The intercellular spaces or substance appeared entirely structureless, without fibrillæ or gran-Besides the multipolar cells and the few spindle cells seen in these parts, there were quite numerous large, and a few small, granular cells; in some of them can be seen large, distinctly-outlined nuclei, containing many granules, and occasionally a highly-refractive granule or oil-globule. There were also seen here granular masses, having no distinct limiting membrane or any definite shape, containing one, two, or three cells or

nuclei similar to those just described.

The vascularity of the tumor proper is scanty, except at its periphery, and directly beneath the mucous membrane no large vessels are visible. The fibrous bands penetrating the tumor from the submucous tissue nearly all carry small arterioles, but their vascular areas, like the fibrous bands, do not penetrate deeply. On the contrary, the arterial supply to the growth seems to be of central or bone origin. The vessels of largest calibre are of more common occurrence in the deeper parts; very few of these vessels can be described as arterioles, for their structure resembles that of capillaries, although of very wide lumen. A few only have fibrous sheaths, and in these instances the spindle cells are laid parallel to their course; the majority present the appearance of nucleated tubular structures, generally deeply stained

The conclusion to be drawn from the microscopic structure is that the growth—originally a small spindle-cell sarcoma, and still preserving, in nearly every part, cells which, in contour and arrangement, are typical of such a tumor—has undergone myxomatous

degeneration.
(To be continued.)

with carmine.

## REVIEWS AND BOOK NOTICES.

ARCHIVES OF DERMATOLOGY. A QUARTERLY JOURNAL OF SKIN AND VENEREAL DISEASES. Editor: L. DUNCAN BULKLEY, A.M., M.D., etc. Philadelphia, J. B. Lippincott & Co., 1879. Vol. v., Nos. 1, 2, and 3.

The "Archives of Dermatology" is not only the only journal in the English language devoted to the specialty of skin diseases, but, it may be safely said, is unequalled by

any similar journal, French, Italian, or German. Its only rival is the well-known "Vierteljahrsschrift" of Auspitz and Pick. But, although this contains possibly a somewhat larger number of abstruse scientific papers, it is too local to represent, as Dr. Bulkley's journal does, with true American eclecticism. all that is good wherever found. The numbers before us present an excellent example of a journal which, while containing scientific matter for the specialist, also furnishes practical information for the general practitioner. Thus, we have original papers on various diseases and groups of diseases, disquisitions on treatment in general, and on classification. with clinical reports on various rare or curious affections which interest the specialist; we have also a series of papers on the practical points of treatment in different skin affections. from the pen of the accomplished editor, one of the most successful dermatological therapeutists in the country. Here the practitioner may find what it is impossible to get in any text-book, from the circumstances of the case, a varied armory, from which he can draw weapons for every emergency.

In addition, the "digests" of current der-

In addition, the "digests" of current dermatological as well as syphilological literature give all information of what is being done in these branches of medicine the world over. We can cordially recommend this journal to the general reader as a special journal which is not for specialists only.

American Health Primers.—The Summer and its Diseases. By James C. Wilson, M.D., etc. Philadelphia, Lindsay & Blakiston, 1879, 16mo, pp. 160.

Summer is over, it is true, but other summers are coming, and this little volume, we trust, may be in many hands before next season. For it is eminently calculated to warn and instruct in those details of household and personal hygiene which are frequently neglected to the detriment of health, just at the time when people think they are in the way of gaining it. Sunstroke, summer diarrhæa, dysentery and cholera infantum, summer and autumnal fevers, colds and hay asthma, and the skin in summer and its diseases,—these are the topics which Dr. Wilson treats in an agreeable and instructive way, interspersing the more serious parts with apt poetical quotations, to lighten the pursuit of knowledge and sugar-coat the pill of information.

BRAITHWAITE'S RETROSPECT OF PRACTICAL MEDICINE AND SURGERY. American Edition. New York, W. A. Townsend, July, 1879. 8vo, paper, pp. 294.

HALF-YEARLY COMPENDIUM OF MEDICAL SCIENCE. Edited by D. G. BRINTON, M.D. Part XXIV., July, 1879. Philadelphia Medical Publication Office. 8vo, paper, pp. 282.

Of these two well-known publications we have no hesitation in expressing a preference

for the American. In addition to the fact that American writers receive due attention instead of being nearly ignored, the system of paging, by which, at the completion of a certain number of parts, these may be separated and rebound in volumes, each containing a full report of progress in a given branch of medicine, renders Dr. Brinton's work one of great usefulness. As, however, few references are duplicated, both the "Retrospect" and the "Compendium" may be procured and consulted with advantage,

#### GLEANINGS FROM EXCHANGES.

THE USE OF THE FORCEPS.—The recent discussion on the use of the forceps in lingering labor has, according to the *British Medical Journal*, given the *coup de grâce* to the antiquated idea, prevalent in the days of Dr. Robert Lee, who performed craniotomy in one hundred and eighty-six cases and used the forceps in only fifty-three cases, that the forceps is a dangerous instrument. No instrument in the whole range of medicine has ever saved more lives and more human suffering than the forceps, the invention and perfection of which constitute one of the chief glories of English midwifery.

A RARE LESION.—Prof. Friedreich reports the case of a patient who has been for the last three and a quarter years subject to chronic convulsions of the lips, the tongue, and the maxillary muscles. The lips were thrust forward, the tongue was rolled about in the mouth, the jaws opened and shut with great force, so that the tongue was frequently bitten. These convulsions continued even while the patient was still asleep. The right pupil was enlarged; the pulse quick and somewhat irregular. Prof. Friedreich thinks that these convulsions were caused by a circumscribed lesion of the medulla oblongata.—British Medical Journal, 1879, vii. 97.

CASE OF RUPTURE OF THE FALLOPIAN TUBES .- Dr. Henry Fisher was called to attend a multipara of 40. She was first seen by him after having been twelve hours in labor. He found her very feeble, with a pale, anxious expression of countenance and sickness of stomach. On examination the os was dilated about an inch and a half, but very rigid and unyielding to the effort of dilatation with the finger. He waited about two hours, during which time the labor became weaker and vomiting more troublesome, but the os had decidedly given way a little, and the head advanced into the pelvis. As the woman complained of great sinking, as if she were dying, he proposed to relieve her with the forceps. but this she strenuously objected to. However, after about an hour she revived a little, and, with a brisk pain, gave birth to both fœtus and placenta, the child being dead. He

left her soon after with a good contraction of the uterus.

Six hours afterwards Dr. Fisher was hurriedly sent for to see the patient, who was suffering, and had been through the interval, with incessant vomiting and faintings. was slightly relieved with ice and small quantities of brandy, so long as no attempt was made to give any kind of food, which would be immediately rejected. At the end of fortyeight hours no urine had passed, nor was there the least inclination for urination. ministered an enema of warm water, which brought a quantity of fæces away from the bowels, but no action of the bladder ensued. Soon after, he passed a male catheter, but found the bladder empty, the catheter passing so freely to nearly its full length that he suspected a rupture of the viscus. Having tried every remedy to allay the sick stomach without avail, she gradually sank, and died on the sixth day.

Post-mortem Examination.—The uterus was found impacted in the pelvis, about the size of a very large cocoa-nut, having a black and bruised appearance on the right side about The Fallothe size of the palm of the hand. pian tube was ruptured about two inches from the uterus, together with the broad ligament as far as the ovary. The tube itself was about the thickness of the little finger, presenting the appearance of a firm blood-clot. Turning to the left side, the Fallopian tube was found in the same condition, but not the uterus. Cutting into its substance on the right side, the organ appeared perfectly healthy, also its cavity. On lifting it out of the pelvis about four ounces of blood was discovered. The bladder was quite empty, and the mucous lining showed considerable inflammation of a chronic character. The stomach was healthy, with the exception of congestion of the vessels on its inferior margin.

PILOCARPINE IN THE PRURITUS OF PREG-NANCY.-"' A country doctor" writes to the British Medical Journal that a single dose of one-third of a grain of nitrate of pilocarpine, by the mouth, served to bring on profuse sweating and salivation, with complete relief of intolerable and persistent itching, which had lasted throughout pregnancy and recurred after delivery.

## NOTES AND QUERIES.

#### OBITUARY.

AT a special meeting of the West Philadelphia Medical Book Club, held Tuesday, August 19, a committee was appointed, upon whose recommendation the following minute was unanimously adopted:

18t. Having learned of the sudden death of our late associate Dr. Horace T. Porter, we, the surviving members of the Club, desire to record our sorrow at the unexpected removal of one whose recently came annual us.

of one who so recently came among us.

2d. We desire also to convey to the family and friends of the deceased the expression of our sympathy with them in their bereavement.

Therefore, be it resolved that this minute be inserted in the journal of the Club, that a copy thereof be transmitted to the family of Dr. Porter, and that another be published in the Philadelphia Medical Times.

C. W. Dulles, L. H. Kirk, M. Lampen, Committee. M. LAMPEN, W. C. DIXON.

August 19, 1879.

#### OFFICIAL LIST

- OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY FROM AUGUST 31 TO SEPTEMBER
- HEAD, J. F., LIEUTENANT-COLONEL AND SURGEON.—Re-lieved from duty in Department of the East, and assigned to duty as Attending Surgeon and Examiner of Recruits at Boston, Mass. S. O. 195, A. G. O., August 25, 1879.
- CLEMENTS, B. A., MAJOR AND SURGEON.—Relieved from duty in Department of the Platte, and to report in per-son to the Surgeon-General of the Army. S. O. 195, c. s., A. G. O.
- HORTON, S. M., MAJOR AND SURGEON.—Relieved from duty in Department of the East, and to report to Commanding General, Department of the Platte, for assignment to duty. To take effect upon expiration of his present leave of absence. S O. 195, c. s., A. G. O.
- Brewer, J. W., Captain and Assistant-Surgeon.—Re-lieved from duty in Department of the Platte, to proceed to New York City, and, on arrival there, report by letter to the Surgeon-General. S. O. 195, c. s., A. G. O.
- TREMAINE, W. S., CAPTAIN AND ASSISTANT-SURGEON.—Relieved from duty in Department of the Missouri, to proceed to New York City, and, on arrival there, report by letter to the Surgeon-General. S. O. 195, c. s., A. G. O.
- VICKERY, R. S., CAPTAIN AND ASSISTANT-SURGEON.—Re-lieved from duty in Department of the East, and to report in person to Commanding General, Department of the Platte, for assignment to duty. S. O. 195, c. s., A. G. O.
- Kimball, J. P., Captain and Assistant-Surgeon.—Relieved from duty in Department of the East, and to report in person to Commanding General, Department of the Platte, for assignment to duty. S. O. 195, c. s., A. G. O.
- HOFF, J. V. R., FIRST-LIEUTENANT AND ASSISTANT-SUR-GEON.—Relieved from duty in Department of the Platte, to proceed to New York City, and, on arrival there, re-port by letter to the Surgeon-General. S. O. 195, c. s., A. G. O.
- ADAIR, GEO. W., FIRST-LIEUTENANT AND ASSISTANT-SUR-GEON.—Upon expiration of his present leave of absence, to report in person to Commanding General, Department of the East, for assignment to duty. S. O. 195, c. s., A. G. O.
- Brown, P. R., First-Lieutenant and Assistant-Surgeon.
  —Relieved from duty in Department of Dakota, to proceed to New York City, and, on arrival there, report by letter to the Surgeon-General. S. O. 195, c. s., A. G. O.
- FINLEY, J. A., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—Relieved from duty in Department of the Missouri, to proceed to Philadelphia, Pa., and, on arrival there, report by letter to the Surgeon-General. S. O. 195, c. s., A. G. O.
- TAYLOR, B. D., FIRST-LIEUTENANT AND ASSISTANT-SUR-GEON.—Relieved from duty in Department of Dakota, to proceed to New York City, and, on arrival there, re-port by letter to the Surgeon-General. S. O. 195, c. s., A. G. O.
- Turrill, H. S., First-Lieutenant and Assistant-Sur-GEON.—Upon expiration of his present leave of absence, to report in person to Commanding General, Department of the East, for assignment to duty. S. O. 195, c. s., A. G. O.
- KILBOURNE, H. S., FIRST-LIBUTENANT AND ASSISTANT-SURGEON.—Relieved from duty in Department of the Missouri, to proceed to New York City, and, on arrival there, report by letter to the Surgeon-General. S. O. 195, c. s., A. G. O.

## PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, SEPTEMBER 27, 1879.

## ORIGINAL LECTURES.

# CLINICAL LECTURE ON FACIAL PALSY.

Delivered at the University Hospital
BY PROF. H. C. WOOD, JR., M.D.
Reported by Dr. Joaquin Castillo.

GENTLEMEN,—I bring before you a case which offers a great deal of interest in regard to the diagnosis of its cause.

This young woman has been out of health for three months. Her first symptom was severe headache, referred chiefly to the region of the mastoid process of the temporal bone of the right side, and accompanied by occasional spells of giddiness. About six weeks ago she noticed for the first time that she would stagger, or even fall, on attempting to walk. To-day she complains of weakness in her limbs and inability to direct their movements. Her right ear cannot appreciate the tick of the watch even when it is applied close against the head; she has lost the sense of taste on the tip of the tongue of the side affected. She has a tumor under the lower angle of the left scapula which I believe to be a neuroma, on account of its exquisite tenderness on pressure.

By looking at her face you can at once detect that her right side is paralyzed; her mouth is drawn a little towards the sound side; if I told her to blow, her right cheek would bulge out, and, in eating, food accumulates between the gum and the buccinator muscle. If I tell her to close her eyes, her right eye remains open, and her forehead is utterly expressionless.

What is the origin of this palsy? Have we to deal with a paralysis of peripheral or of centric origin? I believe it to be peripheral, because we have an entire and uniform paralysis of this side of the face. If it were of centric origin we should have scattered face-areas affected, because the portio dura arises by several disseminated centres, and some fibres would probably escape the lesion. It is by reason of this manifold origin of the facial nerve that complete facial palsy is never centric. It is true that there are in this patient certain symptoms—as the staggering and giddi-

ness—which would suggest a centric origin of the palsy, but these symptoms can be explained otherwise.

The loss of hearing is nervous in its character, and not due to a disease of the ear membrane, for we know that if the vibrations of a tuning-fork are not appreciated when we place it upon the side of the head it means either that the nerve of that side is absent or has been incapacitated by disease to perform its function.

The loss of taste can be accounted for by remembering that in facial palsy, when the lesion is so far back as to affect the nerve-trunk before the chorda tympani is given off, through paralysis of that nerve the secretion of saliva is interfered with and the function of taste is lost upon the anterior portion of the tongue on that side. The fact that the loss of taste in this woman is on the same side as the palsy is a very strong indication that the paralysis is of peripheral origin, for a centric lesion destroying taste and motion on the same side in the localized manner here present is an almost unheard-of rarity, if indeed it be at all possible.

The symptoms that would suggest a centric origin are staggering, giddiness, and incoördination of movements; but these may be due to a local peripheral lesion. In the internal ear we have the organs known as the semicircular canals, which probably are not connected simply with the function of hearing, for experimental as well as clinical evidence shows that they are largely engaged in maintaining the equilibrium between the individual and the external world. Thus, if in a bird we destroy these canals we will see it turning around and around, always towards the injured side, or, in other words, performing what are called circus movements. frogs wounds of the ear produce a similar loss of power on the injured side. In Ménière's disease, you know, apoplexy into the labyrinth is at once followed by staggering, giddiness, etc. Two or three years ago I witnessed a case in which, the man having been shot in the face, a bullet was lodged near the foramen through which the portio dura and the portio mollis enter together; thus pressing on these nerves, it affected profoundly their functional powers, producing phenomena precisely parallel to those which are seen in the animal whose semicircular canals have been injured.

Most probably in this young woman we have a similar condition; not that the semicircular canals are destroyed, but possibly the function of the portio mollis is in some way interfered with by pressure. Another proof that the paralysis is a peripheral one is that the muscles answer much more readily to the continued current than to the galvano-faradic one.

Considering it proven that the paralysis is of peripheral origin, what is the nature It may be rheumatic, or of the lesion? due to disease of the petrous portion of the temporal bone, or to thickening of the membrane lining the aqueduct of Fallopius, or to an injury, or to a chronic tuberculous inflammation of the brain, or, lastly, to pressure by a tumor. We can at once exclude number four, for there is no history of a blow having been received; so can we also exclude number five, for the general appearance and general health of the patient are good, and there is no tenderness or any other local indication of disease of this bone. If the palsy were rheumatic it would have come on suddenly; and in this case the disease has been progressive. It is not due to disease of the petrous portion of the temporal bone, for we have no local tenderness, no signs of suppuration or history of long-standing disease of the

We cannot entirely exclude the thickening of the membrane lining the aqueductus Fallopii, but it is doubtful whether this thickening would be such as completely to obliterate the canal and paralyze the nerves. Moreover, there is no apparent cause for this thickening, and the history of the case is altogether too acute for such a supposition, although not acute enough for the theory of a rheumatic attack. most plausible explanation of the present phenomena is, according to my views, pressure exerted by a growth, with which, it may be, co-operates some thickening of the membrane lining the aqueduct; the character of this foreign body I believe to be specific, although there is no absolute proof of such origin.

Treatment.—We will give our patient the benefit of the doubt, and will place her on large doses of the iodide of potassium combined with the bichloride of mercury. If the trouble were rheumatic, we would place her on the salicylates, although in our hands they have proven of much less service in the chronic or subacute forms of

rheumatism than in the acute forms of the disease. If this trouble is rheumatic in its origin it will be benefited by doses of iodide of potassium, smaller, however, than those given for syphilis.

The use of electricity is advisable, not to cure the disease, but to keep up the tone and proper nutrition of the muscles.

We have not used any blisters behind the ear. The patient is improving under the specific treatment; the tumor at the angle of the scapula is less tender on pressure.

[Under specific and local treatment the patient continued to improve, and was subsequently shown to the class almost recovered.]

#### ORIGINAL COMMUNICATIONS.

## THREE CASES OF CIRCUMSCRIBED INFLAMMATION OF THE LIVER.

BY H. LEAMAN, M.D., Surgeon to the Charity Hospital, Philadelphia. Read before the Philadelphia County Medical Society, June 11, 1870.

I DESIRE to record, though imperfectly, several cases that may not be wholly without value:

Case I.—Mr. T. B., aged 32 years, a wax-maker, had been a soldier in the recent war. While in the service, he had typhoid fever and chronic diarrhea. The latter continued to trouble him frequently, but his general health was good, and he was in the habit of controlling the diarrhea by the use of fried cheese, of which he ate large quantities.

cheese, of which he ate large quantities.

October 5, 1875, he was taken with a chill, followed by a high fever, after having been drinking, which was an occasional habit. He seemed to improve, and went about his work a little during November, but complained of weakness and pain in his right side, and had a constantly high pulse, varying from one hundred and eight to one hundred and sixteen and one hundred and twenty beats in a minute. The temperature record was not kept, but certainly did not range high. The pain required to be relieved with anodynes, was localized in the right hypochondriac region, and could generally be elicited by pressure.

The urine was high-colored; rigors were frequent. Gastric symptoms set in as the case advanced, such as loss of appetite, indigestion, nausea, and vomiting. Intestinal disturbance about ten days before death, consisting of frequent and copious discharges, and altered in character, with pus and blood.

No fluctuation could be detected, but there was increased dulness over right lobe. Death took place, February 11, 1876, from asthenia: duration, one hundred and twenty-six days.

Post-mortem examination was made thirtysix hours after death, Dr. N. Hatfield being

The liver was pale throughout, probably fatty, and enlarged one-third. On the under surface of the right lobe, close to the posterior border, there was an abscess and destruction of the liver-substance, extending over a surface of four square inches and to the depth of two inches. The right kidney was adherent to the liver at its point of contact, and was destroyed on its upper border by ulcerative action to the depth of half an inch. The surrounding parts in the abdomen were involved by plastic exudation as far as the duodenum, where an opening was found two and a half inches below the pyloric valve. There were two small abscesses in the upper surface of the left lobe, about the size of a small wal-nut. The left kidney, spleen, and bowels were of normal appearance.

Case II.—Mrs. S. J. B., aged 40, married, the mother of two children, was taken, February 21, 1877, with a severe, agonizing pain in the right hypochondriac and right lumbar regions. A slight murmur of the mitral valve could be heard over the sternum. She had been treated for dropsical symptoms a year previous. During the month of March, her pain and distress in the side continued; external and internal treatment palliated but did not relieve her. There was, at this time, no swelling; a slight tenderness on pressure was all that indicated local or circumscribed

inflammation.

April 1, 1877, nearly six weeks after the first attack, she was seized with very severe pain in the same region. To relieve it, at her own request and entreaty, nearly a grain of morphia was given hypodermically. It produced, in less than half an hour, a cyanotic hue of the entire body, with failure of respiration, which continued during two hours, and then slowly passed away, leaving no bad effect. Her suffering continued during the remainder of the year. Nausea and vomiting were present from the first, bismuth and morphia being constantly required.

In the months of June, July, and August the bowels were very loose and irritable, and large quantities of fæcal matter, with evidences of blood and pus, were passed. The most relief was afforded by daily injections of large quantities of warm water. In August, 1877, a swelling first began to appear in the right lumbar region, which apparently increased at the time of her menstrual flow. This swelling continued about the same in

size during the fall and winter.

A soft elevation, as if pointing, was distinctly visible on the 3d of March, 1878, when, with the assistance of Dr. Welch, the aspirator was used, under ether, and half an ounce of pus and blood drawn. The needle was undoubtedly in a deep cavity, and moved in different directions, but failed to obtain any more. The puncture continued to discharge, and a second opening formed near the first. Her side continued to discharge freely a healthy pus until about the 1st of June, 1878, when she noticed small, dark fragments passing. These

continued to pass frequently.

June 30, 1878, a large mass, blocking up the opening, was observed, and, being easily removed, was found to be the size and shape of a conical rifle-ball, its substance, on hardening, being arranged in concentric lamellæ. The cavity was thoroughly cleansed, and healed without further trouble. The cicatrix is located four and a half inches to the right of and one and a half inches above the umbilicus, two inches and a half above and two inches to the inner side of the right superior spine of the ilium, three inches below the right thoracic border.

Dr. Frank Woodbury furnishes me with the following examination of the mass:

"The substance, consisting of a number of irregular fragments of a dark-brown color, had the usual appearance of gall-stone, some of the pieces being distinctly crystalline in the interior. By submitting part of the speci-men to boiling alcohol, and filtering through animal charcoal, I obtained the accompanying substance, which responds to the usual tests for cholesterin, and exhibits the characteristic laminated crystals under the microscope. I also found that an acid solution of the original substance gave the ordinary change in color on applying Pettenkofer's test. fact that cholesterine was present in considerable quantity, associated with the biliary acids, would warrant the conclusion that the specimen was originally one or more gall-stones which had been broken into frag-ments."

Case III. - Mrs. M. G., aged 40, mother of six children, stout and fatty, had had, while living in Pittsburg, eight years ago, a severe illness, confining her to bed for three months. during which time she says she spat up blood and pus in quantities. She recollects carrying, previous to that, a bag of meal a mile. Since her illness, eight years ago, she says she has not been able to do anything, and has not seen a well day; has had constant

pain in her right side.

June 16, 1878, she sent for me to treat an attack of diarrhœa, which she said had continued for a week. One prescription of calomel and opium relieved her completely. She then directed my attention to uterine trouble, for which she had been treated before coming to Philadelphia, and which she believed was the cause of all her distress. treated her for a slight inflammation of the cervix during June and July. Her pain, however, continued, and became so severe, about the 1st of August, that I directed my attention to the side. She was then considerably jaundiced; tenderness in the side well marked, with gastric disturbance; urine high-colored; pulse frequent. All these symptoms continued, and became exaggerated. There was increased dulness in the right hypochondriac region, and a swelling appeared in the epigastric region, which was flat and wide. Temperature very slightly increased. The gastric disturbance became intense, and increased until nothing would lie upon her stomach, and vomiting of biliary matter was frequent and copious. She became extremely exhausted.

September 20, 1878, distinct fluctuation could be detected, but there was no marked pointing. Aspiration was performed, with the assistance of Dr. Welch, and four ounces of thick pus removed. The aspirating needle penetrated to the depth of four inches fully, and was freely movable within, and the pus only flowed after some manipulation. The puncture was made five inches above and four inches to the right of the umbilicus, just below the cartilage of the ninth rib. The gastric and general disturbance was immediately benefited, and she made a slow but good convalescence. She still complains of neuralgic pains in her right side; there is no increased liver dulness; her complexion is clear; and she goes about with very good health. There is still a little tenderness in the epigastric region.

The first case I believe to be idiopathic abscess from whisky and exposure, although chronic diarrhœa did undoubtedly precede The second could not be called an abscess of the liver. The symptoms and history were very similar, - almost iden-There was no swelling to indicate at first a distended gall-bladder. The gallstone, being extricated from the bladder, made its way as stated, and there is at present no dulness in the region of the cicatrix; and from her general health there would appear to be no closure of the bile-ducts. The third case, from a close examination of her statements as to cough and sickness eight years previous, I believe to have been an abscess discharged by the lung; there is no evidence of any lung trouble at present; and this is probably a termination of the former trouble.

SIMPLE TREATMENT FOR SCIATICA.—Dr. Ebrard heats a flat-iron, covers it with some woollen fabric which is moistened with vinegar, and applies the apparatus to the painful spot. The application is repeated two or three times a day. As a rule the pain disappears in twenty-four hours, and recovery ensues at once.

THE PHYSIOLOGICAL ACTION OF CARBOLIC ACID ON THE NER-VOUS SYSTEM.

Abstract of a Graduation Thesis.

BY J. SUMNER STONE, M.D.,

Wheeling, West Virginia.

CARBOLIC acid in a very large dose, as is the case with strychnia, may paralyze immediately, death occurring in a few moments without convulsions, or paralysis may first involve the posterior extremities alone, the anterior portions of the body being in a state of exalted ex-

citability running into convulsions.

That these symptoms may occur in warm-blooded animals (rabbits and dogs) has been proved by the experiments of Jogle and Berb (Gazette Méd., pp. 188 and 211, 1872); that they may also be produced in cold-blooded animals is seen in the following experiments:\*

Exp. I.—October 18. Frog. Weight, 32 grammes. 4.15 P.M., injected 1 cc. carbolic acid into dorsal lymph-sac. Immediate paralysis of posterior extremities; anterior in condition of reflex excitability. 5 minutes, dead; 10 minutes, right sciatic responds at 12 cm. (Dubois-Reymond's induction coil with one small Grove cell); 14 minutes, right gastrocnemius responds at 12 cm.

gastrocnemius responds at 12 cm. Exp. II.—October 19. Frog. Weight, 34 grammes. 4.50 P.M., ½ cc. carbolic acid injected into dorsal lymph-sac. 2 minutes, complete paralysis; 8 minutes, dead.

That these results may also occur after removal of cerebrum and medulla will be demonstrated later.

After a smaller dose the animal lies perfectly quiet for a few minutes; soon muscular twitchings, especially in the posterior extremities, will be noticed, or waves of tremors will be seen running through the whole body, while the hyperæsthesia noticed by Labbée rapidly increased.

Very soon distinct clonic convulsions show themselves, both spontaneous and arising from the slightest irritation. This convulsive stage increases until every muscle of the body participates in rapidly-recurring paroxysms. Sometimes in this stage of the poisoning opisthotonos occurs. The length of this stage and its violence depend on the amount of acid ingested. Gradually the convulsions become less and less violent, and the par-

<sup>\*</sup> The above experiments were made in the Physiological Laboratory of the University of Pennsylvania, at the suggestion and under the supervision of Dr. Robert Meade Smith, Demonstrator of Experimental Physiology.

oxysms farther and farther apart, the stage of paralysis slowly coming on. Following the course of the convulsions the paralysis involves the posterior extremities first, the anterior retaining their condition of exaggerated excitability when the posterior are dead to all irritation. Finally the whole body becomes paralyzed, and death occurs from failure of the respiration.

That this paralysis is not due to the destruction of the neurility of either the nerve-trunks or their peripheries, or to the loss in the muscles of their peculiar functions, is plainly evident from the experiments tabulated below. In them will also be illustrated the progress of the three

stages just described.

Exp. III.—October 22. Frog. Weight, 34 grammes. 10 A.M., injected into dorsal lymphsac 0.1 cc. carbolic acid in 0.1 cc. water. 5 minutes, apparent muscular weakness; 12 minutes, slight convulsions on irritation; 14 minutes, convulsions more marked, spontaneous, whole body involved; 24 minutes, the same; 32 minutes, convulsions less marked; 35 minutes, posterior extremities paralyzed, anterior portions of body still convulsed but less marked; 50 minutes, dead; 55 minutes, left sciatic and muscle respond at 12 cm.

less marked; 50 minutes, dead; 55 minutes, left sciatic and muscle respond at 12 cm.

Exp. IV.—October 24. Frog. Weight, 26 grammes. 10.40 A.M., put frog into quart of water impregnated with ½ cc. carbolic acid. Allowed to remain 5 minutes. 5 minutes, unable to jump; 12 minutes, distinct convulsions, both spontaneous and on irritation, especially in posterior extremities; 14 minutes, distinct convulsions, decidedly more marked, subject to the slightest irritation; 15 minutes, general convulsions; 30 minutes, general convulsions, no intermission; 57 minutes, paralysis in posterior extremities; 60 minutes, dead; 62 minutes, nerve responds at 20½ cm., muscle at 19 cm.

These results confirm the conclusions drawn by Jogle and Berb (*loc. cit.*) from their experiments on warm-blooded animals.

That the same results occur in the human subject when a toxic dose is taken, may be seen from a case reported by Dr. W. H. Winslow (*Phila. Med. Times*, September, 1874).

In order to localize the action of this drug, we will next study the effect when the poison is prevented from reaching one

limb.

Exp. V.—November 2. Frog. Weight, 26 grammes. 4.40 P.M., left femoral artery and vein tied. 5 minutes, injected into abdomen 0.5 cc. 5 per cent. solution carbolic acid; 15 minutes, slight convulsions on irritation pro-

duced as readily by irritating left as right leg; 17 minutes, distinct convulsions, left leg involved as other portions of body; 25 minutes, paralysis; 40 minutes, dead; both sciatics and gastrocnemii equally irritable; when divided, irritation of central end of neither sciatic, coil at 0, can produce reflex action.

Exp. VI.—November 3. Frog. Weight, 27 grammes. 4 40 P.M., right femoral vessels tied. 5 minutes, injected into back 0.5 cc. 5 per cent. solution of carbolic acid; 7 minutes, general convulsions in all limbs; 15 minutes, paralysis of both posterior extremities; 20 minutes, dead; both sciatics and gastrocnemii equally irritable; irritation of central end of neither sciatic can produce reflex action.

It is seen from these experiments that the convulsions produced by carbolic acid are not due to irritation of either the motor or sensory nerves or of the muscles, since they occur in a limb in which access of the poison to these tissues has been prevented. They also show that carbolic acid paralyzes neither the motor nerves nor muscles, so rendering it probable that the paralysis which follows the administration of large doses is due to a depressant spinal action.

As regards the action of carbolic acid on the sensory nerves when introduced into the general circulation, it may be surmised from the above experiments that they are not paralyzed, since irritation of the central end of a sciatic which has been protected from the poison preserves its power, when irritated, of evoking reflex action no longer than the nerve which has not been so protected. And although the possibility of the afferent nerves becoming paralyzed after the spinal ganglia have lost their irritability cannot be excluded, it may at present be safely stated that the functions of motor and sensory nerves and muscles are not destroyed in carbolic acid poisoning.

Further on in my reflex-action experiments it will be noticed that late in the experiments there occurs a diminution in the motor power, while the sensory is enormously exalted. This may be due, as Kölliker explains the occurrence of the same phenomenon in strychnia poisoning, to exhaustion following the excessive strain on the motor nerves during the convulsive stage. I think the latter conclusion is a

plausible one in this case.

As to the origin of convulsions in carbolic acid poisoning, John R. Haynes (loc. cit.) and Ernest Labbée say (Arch. Gén., t. xviii. p. 451, 1871) that after section of the cord no convulsions occur. On the

other hand, Salkowski (*Pflüger's Arch.*, Bd. v., 1872), Jogle, and Berb found they did occur after the cerebral centres had been severed, Professor Wood rather leaning to the former view of the subject.

We will now study briefly some of the results of my investigations on this special

point in question.

Exp. VII.—November 11. Frog. Weight, 29 grammes. 4.54 P.M., injected down throat .5 cc. 5 per cent. solution carbolic acid. 4 minutes, muscular tremors, slight convulsions; 6 minutes, cord cut in line of anterior extremities; 9 minutes, violent spontaneous convulsions, especially in posterior extremities; 15 minutes, spontaneous convulsions more violent; 16 minutes, the same; 21 minutes, spontaneous convulsions less marked; 26 minutes.

paralyzed in posterior extremities.

Exp. VIII.—December 6. Frog. Weight, 32 grammes. 4.40, medulla and cerebrum separated at posterior margin of tympanic membrane. 21 minutes, injected into dorsal lymph-sac .4 cc. 5 per cent. solution carbolic acid; 30 minutes, slight convulsions on irritation; 32 minutes, violent spontaneous convulsion, especially in posterior extremities; 34 minutes, the same; 37 minutes, distinct opisthotonos; 39 minutes, slightest jar or breath of air causes convulsions; 45 minutes, convulsions less marked; 50 minutes, convulsions slight on irritation; 57 minutes, convulsions spontaneous but slight; 60 minutes, the same; 64 minutes, convulsions in entire body: 75 minutes, the same; 80 minutes, slight convulsions in posterior extremities, where they have been very pronounced during the whole experiment; 113 minutes, convulsions less

marked; 125 minutes, convulsions very slight. Exp. IX.—November 26. Frog. Weight, 21 grammes. 11.5 A.M., medulla separated at posterior margin of tympanic membrane. 27 minutes, injected into abdomen .4 cc. scant 5 per cent. solution carbolic acid; 30 minutes, slight spontaneous spasms in posterior extremities; 33 minutes, convulsions violent, whole body involved; 40 minutes, milder; 42 minutes, only in anterior extremities.

Exp. X.—November 8. Frog. Weight, 30 grammes. Injected into abdominal cavity .3 cc. 5 per cent. solution carbolic acid. 4 minutes, apparent muscular weakness; 5 minutes, slight convulsions on irritation; 7 minutes, marked convulsions in whole body; Io minutes, cord cut in line of anterior extremities; 12 minutes, convulsions continue same as before section; 15 minutes, convulsions still persist in posterior extremities as in other parts of body; 25 minutes, paralyzed.

More corroborative testimony on this point will be brought forward in the detailing of my reflex-action experiments.

It is seen that, without exception, in the four last experiments distinct convulsions

occurred in the posterior extremities after section of the cord. In Experiments VII. and X. the cord was not divided until distinct convulsions had been produced, and they occurred with the same violence after as before the section. Complete section of the cord was proven by post-mortem examination.

I insert here some of the experiments of Jogle and Berb, on dogs and rabbits, bearing on the same subject:

Exp. I.—Dog. Made section of cord in lumbar region; as result, complete paralysis of posterior extremities. Immediately injected my carbolic acid. 6 minutes after injection, clonic convulsions in posterior as in other parts of body; 2 hours after, same condition persists.

Exp. II.—Rabbit. Injected 6 grammes of solution,—50 grammes acid to 200 of water. After convulsions had developed, made section of cord. 10 minutes, convulsions in posterior extremities; more marked in anterior portions of body; 25 minutes, clonic convulsions in posterior extremities.

Against the results obtained by Jogle and Berb (loc. cit.) and Salkowski (loc. cit.), and those obtained by myself, as heretofore detailed, we have only the results of two experiments by John R. Haynes (Phila. Med. Times, March, 1874), on which and the statements of Labbée (loc. cit.) Prof. Wood bases the conclusions we find in his "Therapeutics and Materia Medica." As for Labbée, I find no detailed experiments, - simply the statement that the drug produces convulsions by irritation of the isthmus of the brain. As for the results obtained by Haynes, I think that, after the whole field is carefully examined, they will be found not to conflict with my results as much as at first would appear.

As before stated, the posterior portions of the body are the first to feel the exciting, then the paralyzing, influence of this peculiar acid. As is noted, also, in one of Dr. Haynes's experiments, the anterior portions of the body remain in a state of over-excitation after the posterior are com-

pletely paralyzed.

By reference to Experiment I. it will be seen that, a large dose being used, I obtained the same result, the posterior extremities being first paralyzed, then the anterior. In many other instances I noted the same results,—that, while it was powerful enough to paralyze the posterior extremities at once, the anterior remained for a varying length of time in a state of

excitation and convulsions. The convulsions were not so violent as when less toxic doses were used; nevertheless, they were distinct. As the dose (three drachms of a saturated solution of carbolic acid) used by Dr. Haynes was, in both cases, given after section of the cord, we do not know but that the same results might have obtained had the sections not been made at all.

I am sure that a corresponding dose, given by Jogle and Berb (loc. cit.) to a dog, paralyzed and killed without producing convulsions. These authors are not clear as to whether the anterior and posterior extremities were paralyzed at the same time or not. They do notice, however, as do also Labbée and Dr. Haynes, that when an ordinary dose is given the posterior legs are the first to be convulsed and the first to feel the paralyzant influence of the drug. It is evident, therefore, that Dr. Haynes's experiments are defective, from the fact, first, that he failed to obtain convulsions prior to section of the cord, and, second, in his conclusions he ignored the important fact that even smaller doses than he used have paralyzed the posterior portions of the body without convulsions occurring at all, in some cases the anterior portions of the body succumbing at the same time, in others a stage of excitation preceding the final paralysis.

Further, one of his experiments is not very conclusive, as no convulsions occurred at all in the anterior extremities, and only slightly in the face and diaphragm.

I have to place against these indecisive experiments the results obtained by Salkowski (loc. cit.), Jogle and Berb (loc. cit.), and myself, and state, as a clearly-proven fact, that the convulsions produced by carbolic acid are spinal in their origin, and that in this portion of the nervous system is located the paralyzant influence of the drug; whether in the sensory or motor tracts, the experiments detailed below will indicate:

Exp. XI.—October 21. Frog. Weight, 34 grammes. 3 P.M., injected into dorsal lymphsac o. I cc. carbolic acid undiluted. 9 minutes, convulsions on irritation; 18 minutes, convulsions spontaneous; 25 minutes, dead; no reflex action produced by irritation of proximal extremity of cut sciatic at o. Irritation of spinal cord produced movements in the anterior portions of the body, but none in the posterior.

Exp. XII.—Frog. Weight, 32 grammes. 4 P.M., injected o.1 cc. carbolic acid into dorsal

lymph-sac. To minutes, paralysis complete; 15 minutes, dead; produces no effect at 0; 35 minutes, irritation of proximal extremity of cut sciatic; 50 minutes, spinal cord irritated; no response in posterior extremities at 0.

It is probable from these results, since we have shown that the sensory nerves are not paralyzed, that the motor columns of the cord are alone paralyzed, the sensory still retaining their function, as shown in Experiment XI., and that the loss of reflex action is due to paralysis of the motor centres of the cord.

These points, to the best of my knowledge, have not been noticed by previous observers.

The total loss of reflex action is denied by Prof. Labbée, but, as in the other case previously noted he gives no experimental proof, we attach no weight to his testimony.

EFFECT OF CARBOLIC ACID ON REFLEX ACTION.

My first series of experiments on this subject will be with the cerebral lobes alone separated; after that I will recount the effect when the medulla is included in the section.

I would especially call attention to a comparison of these two series, for in them I think will be found strong proof of the existence of a centre much under debate among physiologists of the present day, namely, Setschenow's inhibitory centre. In detailing these experiments it will also be noticed that I have given the general run of phenomena produced by the drug.

Reflex action was studied by Türck's method. The cerebrum was removed in a frog, and when the shock had passed off it was suspended by passing a hook through its nose. The time was then counted, by a metronome beating seconds, that the frog would keep its foot immersed in a dilute acid solution; as soon as the foot was withdrawn it was washed with distilled water to remove all trace of acid.

Exp. XIII.—December 3. Frog. Weight, 20 grammes. 10.25, cerebrum separated; 10 minutes, reflex action in 15 seconds, in solution of sulphuric acid, about 10 gtt. to f3iv of water; 20 minutes, the same; 25 minutes, reflex action in 20 seconds; 30 minutes, 0.5 cc. 5 per cent. solution of carbolic acid injected into cellular tissue of abdominal walls; 35 minutes, no reflex action in 60 seconds; 45 minutes, reflex action in 60 seconds; 48 minutes, reflex action in 38 seconds; 55 minutes, reflex action in 2 seconds, marked sponta-

neous convulsions; 60 minutes, reflex action in 1 second, convulsions spontaneous and on irritation.

Exp. XIV.—December 7. Frog. Weight, 28 grammes. 9.12, cerebrum separated at anterior margin of tympanic membrane; 22 minutes, reflex action in 15 seconds; 27 minutes, the same; 28 minutes, injected into dorsal lymph-sac 0.5 cc. 5 per cent. solution of carbolic acid; 32 minutes, reflex action in 12 seconds; 36 minutes, reflex action in 10 seconds: 41 minutes, reflex action in 12 seconds: 46 minutes, reflex action in 25 seconds: 40 minutes. reflex action in 29 seconds; 53 minutes, reflex action in 8 seconds, some spontaneous convulsions; 58 minutes, reflex action in 4 seconds; 62 minutes, reflex action immediately, marked convulsions; 67 minutes, reflex action, convulsions; 78 minutes, reflex action in 3 seconds; 83 minutes, reflex action in 5 seconds; 88 minutes, reflex action in 8 seconds, convulsions, weaker; 98 minutes, reflex action in 30 seconds; 103 minutes, reflex action abolished.

Exp. XV.—November 30. Frog. Weight, 38 grammes. 9.4 A.M., cerebrum separated at anterior margin of tympanum; 14 minutes, reflex action in 20 seconds; 18 minutes, the same; 31 minutes, the same; 32 minutes, 0.5 cc. 5 per cent. solution carbolic acid injected into cellular tissue of abdominal walls; 36 minutes, reflex action in 60 seconds; 41 minutes, the same; 56 minutes, reflex action in 40 seconds; 59 minutes, reflex action in 15 seconds; 59 minutes, reflex action in 15 seconds.

onds.

It is certainly evident, from these experiments, that carbolic acid, when the medulla remains intact, first inhibits reflex action, this giving way to a stage of enormous exaltation, to be followed finally by complete abolition of that function of the cord. When the medulla is included in the section, we see that one peculiar effect of the drug is gone. This will be noted in the following experiments, selected as illustrations.

Exp. XVI.—December 16. Frog. Weight, 32 grammes. 4.40, medulla separated at posterior border of tympanum. 9 minutes, reflex action in 18 seconds; 15 minutes, the same; 17 minutes, injected 0.4 cc. 5 per cent. solution carbolic acid into dorsal lymph-sac; 30 minutes, reflex action immediate, violent convulsions in all parts of the body; 39 minutes, reflex action immediate, convulsions; 43 minutes, reflex action in 3 seconds; 45 minutes, the same; 59 minutes, the same; 64 minutes, the same; 70 minutes, reflex action immediate, convulsions; 80 minutes, reflex action in 6 seconds; 111 minutes, reflex action in 11 seconds; 2 hours, reflex action nearly abolished.

Exp. XVII.—November 26. Frog. Weight, 30 grammes. 11.5, medulla separated at pos-

terior margin of tympanum. 12 minutes, reflex action in 15 seconds; 15 minutes, the same; 25 minutes, the same; 27 minutes, injected into abdominal cavity 0.4 cc. 5 per cent. solution carbolic acid; 30 minutes, reflex action in 1 second, violent convulsions in posterior extremities especially, spontaneous and on irritation; 35 minutes, reflex action immediate, convulsions; 40 minutes, frog jerks when acid touches foot, but unable to lift the member from acid, indicating diminution of motor power; 42 minutes, no reflex action in 1 minute, slight convulsions in anterior extremities.

Exp. XVIII.—November 23. 8.56 A.M., medulla separated at posterior margin of tympanum. 33 minutes, reflex action in 14 seconds; 39 minutes, the same; 44 minutes, the same; 46 minutes, 0.4 cc. 5 per cent. solution carbolic acid injected into abdominal cavity; 51 minutes, reflex action in 4 seconds; 56 minutes, reflex action immediate, slightest irritation causes convulsions; 74 minutes, reflex action in 1 second; 80 minutes, the same; 90 minutes, right sciatic cut; 91 minutes, convulsions in all parts of body except injured leg; 92 minutes, reflex action in 2 seconds; 99 minutes, reflex action in 5 seconds.

As previously intimated, instead of the primary fall we have a sudden and extreme rise in the reflex excitability from the first. It is certainly evident that the primary inhibition noted in Experiments XIII., XIV., and XV. is due to stimulation by carbolic acid of a break centre presiding over reflex action located in the medulla, and that the abnormal rise following this is probably partially due to paralysis of this centre. To this action of the drug we can look for an explanation of the primary apparent muscular weakness following its ingestion.

The experiments that follow are only given as confirmatory evidence of the existence of Setschenow's inhibition centre

of reflex action.

Exp. XIX.—December 14. Frog. Weight, 21 grammes. Some little blood lost. 12.5, cerebrum separated. 15 minutes, reflex action in 15 seconds; 18 minutes, the same; 22 minutes, the same; 23 minutes, injected into dorsal lymph-sac 0.5 cc. 5 per cent. solution carbolic acid; 26 minutes, reflex action in 34 seconds; 29 minutes, reflex action in 60 seconds; cord cut in line of anterior extremities; 35 minutes, reflex action in 11 seconds, slight convulsions; 39 minutes, reflex action in 8 seconds, slight convulsions; 45 minutes, the same; 63 minutes, reflex action in 5 seconds.

Exp. XX.—December 13. Frog. Weight, 25 grammes. 4.30, cerebrum separated. 15 minutes, reflex action in 14 seconds; 20 min-

utes, the same; 24 minutes, injected 0.4 cc. 5 per cent. solution carbolic acid into dorsal lymph-sac; 27 minutes, reflex action in 30 seconds; 29 minutes, the same; 30 minutes, cord cut at posterior margin of tympanum, spontaneous convulsions; 33 minutes, reflex action in 13 seconds; 37 minutes, the same; 49 minutes, reflex action in 6 seconds; 53 minutes, reflex action in 4 seconds; 69 minutes, reflex action, immediate convulsions; 74 minutes, the same; 79 minutes, reflex action in 4 seconds.

Although the action of the drug is, to a certain extent, blunted by the double operation, still the immediate rise following section of the cord below the medulla during the stages of marked depression is strong evidence, with the results obtained from my other experiments, that there is a reflex inhibitory centre in the medulla, and that it is at first stimulated, then paralyzed, by carbolic acid.

Conclusions. — In large doses carbolic acid may cause immediate paralysis through spinal depression. Smaller doses cause clonic convulsions of spinal origin. Convulsions and paralysis may exist at the same time in one animal, the posterior extremities being paralyzed first.

Neither motor nor sensory nerves nor muscles are affected by carbolic acid.

Reflex action with small doses is first diminished through irritation of Setschenow's centre; it is then increased through its subsequent paralysis, the irritation explaining the ordinary occurrence of apparent muscular weakness in the early stage of the poisoning, while the convulsions follow its paralysis. Larger doses may paralyze Setschenow's centre immediately.

It is probable that the spinal action of carbolic acid is confined to the motor columns.

## NOTES OF HOSPITAL PRACTICE.

HOSPITAL OF THE JEFFERSON MEDICAL COLLEGE.

SERVICE OF DR. J. C. WILSON.
I. EXOPHTHALMIC GOITRE.

I SHALL bring before you to-day, gentlemen, two chronic cases. The first of these has been under our observation in the out-patient department for several months, and was on one occasion shown to a previous class by my colleague Dr. Rex. The other presented himself for the first time about a fortnight ago.

E. McC., 26 years old, a store porter, came to us in May last complaining of weakness, excessive beating of his heart, and a swelling in his throat. At a glance you are struck with the enlargement of the thyroid body, and with the peculiar staring, almost fierce expression of the man's face, due to the protrusion of the eyeballs.

Let us attend for a few moments to the patient's history as developed in his replies

to our questions.

He had good health until two years ago, when he hurt himself in some obscure way—"strained himself," as he says—in lifting a heavy parcel. Since then he has been weak, nervous, and subject to heart palpitations on exertion. A year ago these attacks of palpitation became very frequent, and began to occur independently of unusual exertion or effort. In April last he first observed the swelling of his throat, which increased rapidly from that time. The prominence of the eyeballs was noted when he first came under our observation, but it has since increased, and attracted the patient's attention for the first time about two months ago.

In addition to the foregoing symptoms, he is somewhat anæmic, as shown by the pallid, doughy hue of his skin and the marked pallor of his lips and tongue. Without being fat, he is fairly well nourished, and he tells us that he eats well and that his bowels are right. The tongue is

lightly furred.

Analyzing the prominent symptoms in the order of their appearance, we find that the heart is acting with great rapidity. His pulse has been at times as high as 138: yesterday it was 112; to-day it is 120, being accelerated by the excitement of appearing before you. It is strong and full.

The impulse of the heart is strong and heaving, as you see. It is visible over a considerable area of the chest to the left of the lower portion of the sternum. On careful palpation we find that the apex is displaced downwards to the sixth costal interspace, and slightly to the left. There are no murmurs; the first sound is intensified. Here habitual overaction has resulted in hypertrophy.

It is worthy of note that our records show that ordinary doses of veratrum and of aconite have failed to influence either the rapidity or the force of the heart's

action in the case before you.

There is visible throbbing of the caro-

tids; epigastric pulsation is absent. He tells us that the beating of his heart is so strong that it sometimes prevents sleep.

The second of the three prominent symptoms that attracted the attention of the patient was the goitre. The thyroid body is greatly enlarged in all its diameters. It projects prominently forward, and extends as far on each side as the anterior border of the sterno-cleido-mastoid muscle, the right lobe being, however, decidedly larger than the left. Its edges are rounded, and it looks like a cushion under the skin; to the touch it is soft and elastic. On moderately firm palpation a distinct thrill is felt, and through the stethoscope there is heard a loud, continuous murmur, which is increased with each systole of the heart.

A few weeks later in the course of the disease the eyeballs began to protrude, and the exophthalmus is now well marked. The lids, however, still meet on closing the eyes, and the mobility of the globe is as yet but slightly impaired. He tells us that he has noticed no impairment of vision. The pupils are equal, and equally respond to light. The anæmia is decided, but it is not profound. There are no other symptoms in the case that require our attention at this time.

May I call upon some member of the class for a diagnosis? Many voices reply, "Exophthalmic goitre." It is correct. I am surprised that you all call it by the same name. When diseases are obscure as to their pathology or as to their causation, they are apt to be known by several names. This is such a disease. Its causation is involved in great obscurity. Except that the neurotic constitution is a predisposing cause, we know but little with certainty of the actual causes of this malady. It has been attributed to fright, to mental shock, to disorders of the reproductive system. It is certainly far more common in women than in men.

The history of the case before you points to a "strain." But I am not sure that the

strain was the exciting cause.

The pathology of the disease is also obscure. All the symptoms point to the sympathetic system, and in truth to the cervical ganglia, from which you know filaments are given off directly to the heart and the thyroid vessels, and by way of the carotid and cavernous plexuses to the parts about the eye. And in most of the records

of the post-mortem appearances—which are as yet but few—lesions of the cervical ganglia of the sympathetic are noted. But not in all. Several cases are on record in which the sympathetic was found unaltered. This malady is known among the Germans as Basedow's disease, from the writer to whom, as they claim, is due the credit of having first fully described it; among the English as Graves's disease, for a similar reason. The French call it exophthalmic goitre. When we have learned more about it, it will doubtless receive a more distinctive and satisfactory name.

The increase in the size of the thyroid body is due to vascular dilatation; at a later stage of the disease actual glandular

hypertrophy takes place.

The eyeballs are mechanically pushed forward in part by enlargement of the vessels behind them, and in part by an ab-

normal deposit of fat.

The treatment of this case has consisted chiefly in the administration of remedies designed to improve the general health and the state of the blood. As has been stated, cardiac sedatives have been given without benefit. For a period of eleven weeks he took the fluid extract of ergot in doses of thirty minims thrice daily. Under this treatment there was decided im-. provement. The pulse fell in frequency, and the goitre diminished in size. patient's general condition also improved; the anæmia became less marked, and he was less "nervous;" his strength increased. But the ergot disagreed with his stomach and had to be discontinued.

We will resume its use; but, in order to avoid all digestive disturbances, it shall be given hypodermically. The best preparation for this purpose is the aqueous solution of ergotin, each minim of which represents one grain of ergot. The dose shall be half a drachm every other day.

We will also employ galvanization of the cervical sympathetic by means of the con-

stant current.

Let me put you on your guard with reference to any apparent improvement that may follow the use of remedies in exophthalmic goitre. The natural history of the disease shows a tendency in many cases to spontaneous temporary amelioration of the symptoms. Hence it is advisable to wait for steady and progressive improvement before concluding that any treatment or course of treatment is a successful one.

## TRANSLATIONS.

SARCOMA OF THE LUNG AND RIGHT KID-NEY MISTAKEN FOR A GUMMA--CARLES AND NECROSIS OF THE RIBS.—Dr. Bellouard read an account of the following case at a recent meeting of the Société Anatomique (Le Progrès Méd., 1879, p. 487). The patient, a man of 52, had had various syphilitic troubles from the age of 25. He sought relief for an osseous affection seated at the border of the sternum. M. Gosselin diagnosticated necrosis of the sternum of syphilitic origin, and removed a sequestrum the size of a five-franc piece and extending through the thickness of the sternum. Ten weeks later there was observed a bony enlargement with considerable surrounding induration about the cavity left by the sequestrum, which was situated at the union of the upper and second portions of the sternum. In the centre of this enlargement was a deep, irregular fistula, from which escaped a large quantity of foul pus. For some time previous the patient had suffered occasional attacks of suffocation, particularly at night. These were followed by fits of coughing. Auscultation and percussion failed to show anything abnormal.

The patient gradually sank and died. At the autopsy, in addition to the enlargement mentioned, there was erosion of the inner face of the third rib on either side of the sternum. There were also a number of adhesions about the mediastinum, the anterior portion of which was adherent to the sternum. The fistulous orifice could be traced back into a focus of purulent pleuritis, encysted between the mediastinal and parietal pleura of the right side. It was from this point that the purulent matter noted as escaping during life proceeded. There was an effusion of sero-pus in the right pleural cavity, with several pneumonic centres through the left lung, and sub-pleural emphysema. The most interesting lesions, however, were found in the summit of the right lung (otherwise intact) and in the kidney. The pulmonary tumor was the size of a hen's egg, resembling closely to the naked eye a gumma, so that it was pronounced such by several skilled physicians. In consistence this tumor was somewhat hard. On section it showed a yellowish-white color, marbled with black striæ, causing it to look like Roquefort cneese. The surface of the section was

not dry, as in ordinary gummata, but a small quantity of fluid could be obtained by scraping. The texture of the lung was persistent even in the neoplasm, which was surrounded by a capsule of connective tissue separating it from the surrounding lung. Microscopic section showed a fasciculated sarcoma developed in the alveoli of the pulmonary tissue. The renal tumor was the size of a hazel-nut, situated in the cortical structure of the right kidney, and presented the same appearance as the pulmonary tumor. The interesting point about these tumors is with regard to the difficulty of distinguishing them from gummata; nothing but the microscopic examination would render the diagnosis certain.

ACTION OF ATROPIA ON THE CIRCULA-TION.—Cavazzani (Lo Spallanzani; Jour. des Sci. Méd., 1879, p. 466) concludes, from comparative experiments made upon both frogs and man,—1. That atropia paralyzes the cardiac fibres, since the diastolic period lasts longer, while the systolic period diminishes. 2. With the frog the cardiac revolutions become rarer from the beginning of the experiment. 3. The capillaries and the ultimate arterial and venous ramifications experience a notable constriction, proportional to the dose made use of, but less than that obtained from quinine. The constrictive effect may be uniform, but sometimes it is jerky from the constriction of the separated fibres. 4. Small doses augment the rapidity of the peripheral circulation, and the cavities of the heart become more entirely filled. 5. Larger doses, constricting the capillaries, and thus placing a considerable obstacle in the way of the peripheral circulation, cause slowing of the blood-currents. The blood-globules evidently lose their property of absorbing oxygen. 7. Large and small doses give identical results with regard to the circulatory centre and the vascular network, but large doses slacken the peripheric circulation by augmenting cardiac hyposthenia and constriction of the vessels. 8. Death occurs after large doses by paralysis of the heart, which is arrested in diastole. 9. The narrowing of the capillaries, the enfeeblement of the cardiac impulse, the diminished oxidation of the blood, offer an explanation of the therapeutic action of this substance on man. and, especially, of the favorable action of atropia in acute and chronic articular rheumatism.

#### PHILADELPHIA

## MEDICAL TIMES.

PHILADELPHIA, SEPTEMBER 27, 1879.

#### EDITORIAL.

SURGEON WOODWARD'S NEW VOLUME.

ON returning from a long journey we found, inter alia, on our table a notice from the post-office department that there was a package at the post-office too heavy for the carrier. Not long after this our manservant returned laden with the long-expected second volume of the Medical History of the War. Dr. Woodward's style of writing is always perspicuous, and usually as light as the circumstances will allow; but the circumstance of there having been in the Federal troops 1,739,135 cases of diarrhœa and dysentery during the late war seems to have overpowered the natural brevity and lightness of the doctor; the fruit of his labor is certainly heavy, weighing, according to our office scales, ten and a half pounds, which, for a book with a muslin cover, is sufficient. Seeing that this great mass is all upon a comparatively limited disease or a group of diseases, we fear many will be tempted to sigh for the days of Methuselah.

In war times, however, abdominal fluxes are almost as destructive as the breechloading rifles, and certainly slay more than do the artillery. They are therefore really worthy of all the care and attention that can be betowed upon them. And if the author of the present tome has put the labor of half a lifetime upon the subject, it is for the universal benefit of all who are swept into the vortex of the world's curse. Of course we cannot here attempt an elaborate notice of such a volume, but we do congratulate Dr. Woodward upon the completion of one of his herculean tasks. Examined either in its historical,

its scientific, or its clinical portions, the work evinces labor whose object and result have been the complete exhaustion of the subject. There would seem to be nothing left to say, only a remaining task for some one to boil down into a small compass this huge book, which must remain for all time a monument of thoroughness and completeness.

#### PROCEEDINGS OF SOCIETIES.

PHILADELPHIA COUNTY MEDICAL SO-CIETY.

A CONVERSATIONAL meeting was held Philadelphia, June 11, 1879, Dr. John H. Packard, Vice-President of the Society, in the chair. Dr. Henry Leaman presented a paper on "Circumscribed Inflammation of the Liver," and recommended aspiration in the treatment of cases complicated by hepatic

Dr. M. O'Hara said that the diagnosis of abscess of the liver is often a post-mortem affair, as, unless it should point externally, it rarely can be positively determined during life. In a recent case he had suspected abscess of the liver, as there were symptoms present which suggested pyæmia; he had not as yet positively decided, but would report the case at some future time. He inquired of the lecturer concerning the points of differential diagnosis of abscess of the liver, especially in regard to the temperature record, which is very important. Is abscess of the liver accompanied by the sweating and the high temperature that generally attend other internal collections of pus?

Dr. George B. Dunmire said that in one of the cases mentioned by the lecturer it was reported that the patient was addicted to drinking. In a case occurring in his own practice there seemed to be some connection between the parents' free use of wine and hepatic trouble in a child. When the infant hepatic trouble in a child. When the infant was born it was poorly developed, and soon became affected by disease of the liver, from which it died. At the post-mortem the liver was found to be greatly enlarged and fatty, but no abscess was discovered. This case was referred to as showing some possible connection between intemperance and liver-

disease, even by inheritance.

Dr. E. T. Bruen said, in reply to Dr. O'Hara, that in two cases of abscess of the liver, without previous dysentery, which he had observed himself, the temperature record had not been what would be expected in cases of large internal abscess elsewhere in the body,—as in empyema, for instance. The temperature was exceedingly uniform, with a

rise in the evening and corresponding fall in the morning,—an apparent fever, remittent in type,—which kept on a regular course for a month or more, ranging in the neighborhood of 101°, but not going above 10210. Frerichs calls attention to this peculiarity of this remittent temperature as one point of importance in the diagnosis. Some of his (Dr. Bruen's) patients had had sweats, but they had not been attended with the irregularity of temperature which we find accompanying empyema or pyemic abscess of liver. In one of these two cases there was some en-largement of the liver, but the diagnosis was doubtful: finally, the abscess ruptured through the diaphragm and was discharged through the lung. In his work on diseases of the liver, Frerichs says that in cases of abscess of the liver the line of dulness will be depressed on full inspiration, which does not take place in empyema.

Dr. Charles B. Nancrede said that Dr. Louis Starr had reported three cases of abscess of the liver where the diagnosis was made during

Dr. S. D. Risley asked if there were any observations, in these cases of abscess of the liver, as to whether or not there had been intolerance of drugs like iodide or bromide of potassium, or of other alkaline salts.

Dr. Leaman said that bromide of potassium was used in one of the cases, at the suggestion of Dr. Da Costa. It produced no special dis-

turbance.

Dr. Risley said that he had asked the question because, a few years ago, he had had occasion to prescribe iodide of potassium where he had thought it indicated by other difficulties not connected with the liver. He had been warned by the patient that she could not take this drug, as it had produced bad effects once before, when she took it for bronchitis. Nevertheless, he desired to see the effect of the salt, and ordered small doses,three grains three times a day. In three days she came back to him in a complete state of iodism. She subsequently had fulness in the right hypochondriac region, with enlargement of the liver, followed by hepatic abscess, which discharged through the lungs. Possibly the idiosyncrasy in regard to the iddide was caused by the pre-existing disease of the liver, which interfered with elimination, hence the iodism from small doses of the iodide salt. It is possible that the abscess and the iodide stood in the relation of cause and effect.

Dr. William M. Welch said that aspiration had proved of great advantage in a case of hepatic abscess under his observation. Improvement had commenced immediately after the aspiration, and had steadily continued until the patient was perfectly restored to

Dr. O'Hara remarked that in distinguishing true hepatic abscess from empyema the microscope might be useful.

Dr. Charles H. Thomas, several years ago, had a patient under his charge in whom hepatic abscess appeared. There was no clear history of the case, but injury had not preceded it. It spontaneously opened externally before coming under his care. The pus being rather offensive, he injected the cavity with disinfectant solution daily. The opening was two and one-half inches above and to the right of the umbilicus, directly over the liver. The patient afterwards recovered.

Dr. W. R. D. Blackwood stated that, in regard to the administration of iodine salts, he had not seen any reference to a want of their elimination occurring in disease of the liver, and would not consider hepatic disorder as a contra-indication to their employment. chloride of ammonium has lately been highly recommended by an East Indian physician for congestion of the liver, and, from the physiological experiments that have been tried, it would really seem as if this salt had some direct control over its function. It had certainly appeared to have such control in some cases of hepatic congestion in which he had ordered it.

Dr. Thomas Rich had noticed, in an edition of "Watson's Practice" published twenty years ago, that chloride of ammonium was recommended as a cholagogue. It appears now that physiological experiment has con-

firmed this old clinical view.

Dr. Bruen said that the reference to the action of muriate of ammonia had recalled to him an interesting case. A well-known druggist in this city is subject to attacks of hepatic trouble of an obscure character, accompanied by jaundice. In this case muriate of ammonia (compressed pills, five grains each, given every two or three hours) has a very decided effect upon his condition; the hepatic congestion yields to it even more quickly than to calomel.

In reply to Dr. O'Hara's suggestion, he said that microscopic examination of the pus does not always show such distinctive characters as might be expected. In one case which he had under his care he had drawn off with the aspirator about two ounces of cheesy matter from an abscess in the right hypochondrium. The examination only revealed pus-corpuscles and leucine crystals, but no hepatic cells, although it was evidently discharged from the

Dr. Frederick P. Henry said that the East Indian physician who had recommended chloride of ammonium as a cholagogue is named Stuart. After reading that communication (in the Lancet, he believed), he had made use of this salt in several cases of obscure liver trouble. In cases of jaundice accompanied by fulness in the region of the liver, his plan of treatment is to give diaphoretics, such as jaborandi, so as to make the skin act freely, to be followed by chloride of ammonium. He had never seen a case of

congestion of the liver that this method would not relieve. One case of threatened abscess was completely cured in six weeks. In regard to the microscopic characters of the pus from hepatic abscess, he reported that in one of Dr. Starr's cases epithelial cells were found which could not be distinguished from livercells.

Dr. J. T. Eskridge had noticed the article referred to, and had since then treated several cases of congestion of the liver with threatened abscess at the Catherine Street Dispensary. He gave twenty grains three times a day, with the effect of almost immediately relieving the congestion, and in the course of two or three weeks the patient was completely restored. Equally good results occurred in several cases. The symptoms had been loss of appetite, coated tongue, increase in the size of the liver, with a feeling of oppression in the hepatic region, and some

fever.
Dr. W. R. D. Blackwood inquired as to the rapidity with which the drug acts. Dr. Eskridge speaks as if it acted almost immediately; others believe that it accumulates in the blood until, finally, the full constitutional effect is produced. The patient complains of a sudden grinding pain, which sends a thrill through him; at this time the drug is thought to act. In one of his own cases this cumulative effect certainly occurred, where hepatitis had followed repeated salivation.

Dr. Eskridge said that some of the patients. while under this treatment, had spoken of a tearing pain in the liver, as if something had broken loose.

Dr. Samuel R. Skillern advocated free drainage and antiseptic injections in hepatic

Dr. O'Hara referred to a case of dyspepsia with great flatulence and pain, in which the liver was probably at fault. The patient received no benefit from a variety of drugs until muriate of ammonia was administered in twenty-grain doses, when good results fol-

Dr. F. Woodbury said that the effect of ammonium chloride upon the liver is apparently that of a stimulant to the secreting cells, since the experiments of Rutherford have shown that it is a true cholagogue. The nervous symptoms of obscure hepatic abscess have been spoken of by Dr. Hammond, of New York.\* The diagnosis of a case of abscess of the liver from one of perihepatitis, empyema, or abscess in the wall of the chest is not essential when considered from a therapeutic stand-point, since the treatment of these conditions is almost identical. Having determined, with the aid of the aspirator or the hypodermic needle, that pus is present in considerable quantity, the obvious course to

\* In a clinical lecture entitled "On Obscure Abscesses of the Liver; their Association with Hypochondria, and their Treatment." St. Louis Clinical Record, June, 1878, p. 49.

pursue is to evacuate the abscess, wash out with water tinctured with thymol, carbolic acid, Lugol's solution, or other antiseptic, and, finally, to adopt the ordinary measures to secure free drainage.

Dr. Packard stated that in threatened hepatitis ice is very useful in relieving pain and in reducing the inflammatory action. should be wrapped up in flannel and applied, several times daily, for a few minutes at a time. The abscess may be caused by gallstones, where the aspirator would be inefficient. He recalled a case where such an abscess was accompanied by gall-stones, which kept a fistulous tract open for two years, when they were finally discharged. Aspiration would not relieve permanently a condition such as this, which requires a free

opening. Dr. Leaman said that the main points of interest in the cases that he had communicated lay in the facts that they corresponded closely with the symptoms of hepatitis as described in the books, and, secondly, that aspiration was successful in their treatment. There was no subsequent discharge at the point of puncture. He would insist upon the value of aspiration in the treatment of deep abscesses not only of the liver, but also in those connected with caries of the vertebræ or the hip-joint.

#### ON THE VALUE OF SPLINTS IN THE TREATMENT OF FRACTURES.

Dr. Packard asked Dr. Taylor to take the chair, to allow him to make a few remarks on the value of splints in the treatment of frac-This subject had been discussed at a recent meeting of the Society, when a paper was read on fractures in the neighborhood of the elbow-joint, and some statements were made at that time which seemed to him likely to lead to great errors in practice. He desired, therefore, to refer briefly to some of the points of treatment more particularly of fractures of the upper extremity. When a bone is broken and reduction is accomplished, if we could hold the parts in apposition until union had occurred, we should get good results invariably; of course this cannot possibly be done, and we therefore have to resort to mechanical appliances that will substitute the hands and prevent muscular action or other disturbance of the fragments. This is what is needed, - an apparatus that will hold the bone, just as the surgeon would hold it with his hands if he could, until union takes place. Dr. Packard would not go so far as to say that no fracture of the extremities can be treated without splints. Some surgeons, as Dr. Moore, of Rochester, and Dr. Pilcher, of Brooklyn, have stated that fractures of the lower end of the radius do very well with strips of sticking-plaster or a bandage around the wrist, and others rely mainly upon postural treatment. One point that he wished to insist upon was that the surgeon should not rely too much upon routine treatment. The idea seems to prevail that if we have a certain fracture, all that is needful is to use a certain

splint.

In order to treat fractures in a rational way, we must deal with each case according to its indications, and before applying an apparatus we should adapt it to the special conditions present. He also referred to several points in the application of splints. Arms vary in their length and conformation; there are no two exactly alike: hence a special splint should be arranged for each particular case, and should be carefully fitted to the arm, so as to keep it in the most suitable position.

It is almost impossible to keep the fractured ends completely at rest by a splint applied only to one side of the limb. Binders' board forms one of the best materials we have for making splints, as it can be moulded so as to give support on each side as well as anteriorly and posteriorly. Plaster of Paris and silicate of soda also are valuable in some cases, after the swelling has subsided; by this means the parts may be kept perfectly immovable, and all risk of displacement avoided.

In treating fractures of the forearm, the easiest position is that in which the elbowjoint is flexed to a right angle and the hand brought in front of the chest with the thumb upward. Holding the forearm in this position, after the fracture is reduced, plaster may be applied. First a roll of cotton wadding or thin bandage is wrapped around the forearm; a crinoline bandage is next applied, and mixed plaster rubbed into it with the hand, a sufficient number of layers of bandage being used to make it of the desired strength when dry. In applying the bandage no force should be used, but it should only be drawn smoothly, making reverses whenever necessary, or even a figure of 8, in the middle of the arm. This makes a dressing that perfeetly retains the bones in proper position and keeps them at rest. These are the imand keeps them at rest. These are the important principles to be kept in mind in the treatment of all fractures; and the appliance that will accomplish this most perfectly is the best one for the case.

Dr. Blackwood agreed with the lecturer. He had listened to a paper, some time ago, recommending the treatment of fractures involving the elbow-joint without the use of splints. A case occurring shortly afterwards he had treated solely by adhesive plaster; another he had treated with binders' board. The result in the first case he is ashamed of,

but not of that in the second.

Dr. O. H. Allis said that some of the remarks of the speaker seemed to point to a paper read by himself before the Society a few weeks previous, and he would like to correct some wrong impressions that had grown out of it. In the first place, he was certain that he had not advised dispensing

with all support at the elbow-joint when he said that he never used splints. He was always careful to support the fragments during the entire cure. He said that when one of the condyles was fractured, it was in effect to rupture a lateral ligament, and hence there was no longer any lateral support. To compensate for this he was in the habit of putting a strip of adhesive plaster along the inner and outer aspects of the joint, and afterwards to put transverse strips encircling the part from the middle of the upper arm to the middle of the forearm. These, being adhesive plaster, would stick without constricting the part, and he had found a dressing as simple as this sufficient to bring about a perfect union. More frequently he added a starch dressing to the adhesive-plaster dressing, and when the latter hardened it was as effective and protective as any wooden splint.

Dr. Allis, in support of his views, showed cases that he had treated, and these he contrasted with others that had been treated by the wooden splints. He claimed that the legitimate outgrowth of the use of the wooden splint in treating fractures of the elbow-joint was a marked angular deformity. "Dr. Packard," he said, "has just illustrated a most ingenious splint that he devised for his little child. Now," said Dr. Allis, "this is in full harmony with what I have said." He used splint material, and adapted this material while in a plastic state to the fractured arm. Any such device would meet his approval. What he was contending against was the use of wooden splints, that will, when applied to the broken bone by means of a bandage,

draw it to the splint.

One other point that has been alluded to is the employment of passive motion. Upon this point, Dr. Allis said that he was not accustomed to employ early passive motion. He believed that the danger of anchylosis was greatly overestimated. He, however, only desired to state his views, but not to speak with the authority of a teacher. In his own practice his first aim was to limit and control the inflammatory stage that usually succeeded fracture involving the joint. He had never met with a case of stiffening where this inflammation had been trifling and where the joint had been kept at rest during repair. In other cases, where the inflammation ran very high, his plan was to wait carefully for its subsidence before he began with passive motion, and this he was careful so to employ as not to retard the progress to a cure.

Dr. C. B. Nancrede opposed routine treatment. Fractures vary in their position and tendency to deformity, and one splint will not suit all cases. In fractures involving the elbow-joint, it is customary to change the angle of the splint during the treatment. The tendency to deformity increases as the arm is extended. When Dr. Allis recom-

mended that children should be allowed to play with the fractured arm unprotected by a splint, he supposed that he would scarcely be willing to allow them to play base-ball; but they could not be prevented from it, and on this account the speaker would not dare to treat such cases without splints. He had frequently seen boys with their arms in splints playing ball, even after he had forbidden them to do so.

Dr. S. R. Skillern detailed a successful case of intracapsular fracture. (Will be published

in extenso in the Times.

Dr. Packard, in reply to a question in regard to treatment of fractures of the neck of the thigh-bone, mentioned a case which he had under his care some time ago. It was that of a young man who had a fracture of this kind, probably intracapsular. He saw the case within an hour after the injury, put him in bed, and, with the aid of Dr. Nancrede, applied extension. The result was perfect: within eight weeks he was driving a wagon in the street, able to attend to his business.

In treating fractured femur in elderly people, it might sometimes be well to employ a plan lately suggested and extensively used with advantage in cases of hip-joint disease in children. In those who cannot bear confinement, it might be well to raise the foot of the sound limb from the ground by putting a high sole on the shoe and using long crutches. Thus the weight of the injured limb, aided perhaps by attaching a piece of lead to the

foot, would maintain extension.

Dr. Ulrich, of Chester, present by invitation, described a method of treatment which he believed to be original. In treating fracture of the leg, he takes a piece of iron hoop long enough to go down the outer side of the limb, and, bending under the foot, passes up the inner aspect to the same distance. This is to be applied accurately to the contour of the *sound* limb, and then taken off and turned around and put on the broken leg, where it serves both as a guide and as a lateral splint, with the ordinary roller bandage. It can be used where other apparatus cannot be ob-

Dr. Packard approved this suggestion as highly ingenious. He also said that it is sometimes necessary to transfer patients with fracture of the leg to a considerable distance. In a recent case that he was about taking to the sea-shore, he had been using suspension by means of Smith's anterior splint with lateral pasteboard supports. He thought the limb might be comfortably carried in a box, being swung from the top by straps of elastic bandage. This might also be useful in the treatment in bed, and would allow the patient to be moved about the room, the suspension-box being placed in a chair in front of that occupied by the patient. [The plan was carried out, and succeeded admirably.—J. H. P.]

PATHOLOGICAL SOCIETY OF PHILA-DELPHIA.

THURSDAY EVENING, MAY 8, 1879.

THE PRESIDENT, DR. H. LENOX HODGE, in the chair.

(Continued from page 610.)

Myeloid sarcoma of jaw. Presented by Dr. M. Longstreth.

SARAH R., æt. 30, married; admitted to the Pennsylvania Hospital, under the care of Dr. R. J. Levis, on March 14, 1879. Her family and personal history offered no peculiarities. Two years previous to her admission, and shortly after the extraction of two molar teeth from the left side of the lower jaw, she noticed a slight swelling and ulceration of the gum around the sockets of the removed teeth. A month later a small piece of bone (alveolar process) came away, and after a month's time the place healed. Some time after this she noticed a small swelling, which was not sensitive or painful to touch, but very vascular, bleeding on the slightest pressure. Frequently, on waking in the morning, she found her mouth "full of blood." About a year ago a part of the tumor was removed; about six months ago an unpleasant odor was first noticed from the disease.

Upon admission, a tumor was found growing on the left side of the inferior maxilla, at the part corresponding to the site of the extracted teeth. It was covered by vascular granulations, which bled very easily on handling. The odor from the mouth was

very offensive.

On March 26, Dr. Levis excised this part of the bone; the incision, anteriorly, passed just

in front of the first bicuspid tooth; posteri-orly, at the angle of the jaw.

The specimen showed the lower half of the body of the jaw, at the seat of growth, entirely unchanged and not affected with disease; the periosteum covering it was normal. The tumor arose as a fungous mass from the alveolar border, and about half an inch above the level of this border of the bone. The breadth of the tumor, transversely to the jaw, measured two inches; its extension along the bone was about the same. The growth seemed to have sprung from the sockets of the teeth, and was extending around the remaining bicuspid tooth. The alveolar process has disappeared; the periosteum around the base of the tumor was much thickened, but there were no spiculæ or plates of bone to be found in it or on the surface of the tumor. The upper surface of the growth was broad, flattened, and ulcerated, and denuded of the mucous membrane; whilst laterally this structure covered the growth. The consistence of the tumor was very firm; on section, its appearance was nearly uniform throughout, of a reddish, flesh-like color.

A microscopic examination of the tumor

showed the structure to be that of myeloid or giant-cell sarcoma. The only peculiarity to be noticed was that the myeloid masses or giant cells were of small size.

Sacculated kidney. Presented by Dr. F. P. HENRY.

I have chosen, for the specimen I am about to present, the term sacculated in preference to surgical or cystic, because the term surgical, while conveying a dim idea of the etiology of the affection, gives none whatever of the morbid process, and the term cystic is also applied to another affection. I would suggest, as better than any of them, the term alveolar, on account of the striking resemblance which the dilated pelvis and calices of the kidney bear to a lung-alveolus with its vesicles.

This affection of the kidney is, I believe, invariably caused by a stenosis in some portion of the genito-urinary passages, but in the case under consideration the point of obstruction is not manifest. There is, it is true, in the region of the fundus of the bladder, an intramural tumor, which, on being cut into, was found to contain pus and caseous matter, but it is not so situated as to compress the ureter, either at its orifice or during its course through the wall. Before the kidney was cut open, a very slight pressure upon it caused pus to flow freely into the bladder. are well-marked evidences of cystitis, and cystitis alone is capable of causing the condition presented by this kidney. Indeed, vesical catarrh is given, by writers upon the subject, a prominent place in the etiology of the disease. I have seen no attempt to explain the modus operandi of this cause, but it is probably as follows:

In uncomplicated cystitis the bladder is never distended; its capacity is diminished by the thickening of its walls and the state of contraction in which it is habitually main-This contraction, which is great, becomes extreme so soon as a few drachms of urine have collected, and, as a consequence of this disordered function, the ureter and pelvis of the kidney have to serve vicariously as receptacles for the urine. In health the bladder is passive except during micturition, and offers no resistance to the function of the ureter; in cystitis the function of the ureter is interfered with, and the urine reaches the bladder largely (in some cases, perhaps,

entirely) by hydrostatic pressure.

The ureter is dilated to the size of one's forefinger, and the kidney is converted into a large sac subdivided into numerous smaller cavities. The walls of the sac are thicker in the situation of the medullary cones than elsewhere, and here traces of gland-structure are plainly perceptible. The walls of the sac contain, in portions, numerous cheesy foci, varying in size from a pin's head to a pea, and large sections appear to be infiltrated with caseous matter. The capsule is greatly thickened, and, for the most part, easily separable from the surface of the organ. cavity of the sac is lined with what appears to be a pyogenic membrane. The sac contained three-fourths of a pint of pus, and measures at present, after several weeks' immersion in alcohol, six inches and a half in length and four and a half inches in width at the centre. The ureter is only five inches

The patient from whom the specimen was taken was a male, æt. 28, who was admitted to the Episcopal Hospital on January 6, 1879, for phthisis and cystitis. He was at one time transferred to the surgical ward, and sounded for stone by Dr. Forbes: no calculus being detected, he was returned to the medical When I went on duty, on April 1, he was greatly emaciated, and was annoyed by a constant dribbling of urine and pus, the lung symptoms occupying a very subordinate position. He died a short time after I went on duty, and without uræmic symptoms. The lungs were stuffed with tubercles.

The history of these cases is not always such as is here described. That a spontaneous cure of such a morbid process may occur is shown by a specimen I presented to the Society in 1876 (Path. Soc. Trans., vol. vi. p. 87). The kidney was a mere sac "encapsuling a quantity of mortar-like substance, which proved, on microscopic examination, to be inspissated pus. At one time the kidnev referred to must have been in a condition very similar to the one now before the Society. In the specimen of 1876 the ureter was occluded, and it is possible that the first step in the direction of a spontaneous cure is occlusion of the ureter.

Cirrhosis of kidney. Presented by Dr. F. P. HENRY.

The specimen of contracted kidney that I now present, a section of which I have placed under the microscope, is of interest, from the fact that it was taken from a case of phthisis, and, further, because in the recent state the granulations of the cut surface were so fine and translucent that I mistook the specimen for one of tuberculosis. It was not until I had made a microscopic examination of the gland that I recognized the true nature of the morbid process of which it is the seat.

The patient from whom the specimen was taken was admitted to the Episcopal Hospital on November 16, 1878. From notes made by Dr. Starr at the time of admission, I find that the urine contained "a trace" of albumen. The case presented no unusual features of interest, and death occurred on April 7, without uræmic symptoms. I have, on previous occasions, remarked upon the almost invariable absence of uræmic symptoms in cases of Bright's disease associated with phthisis. Those observations had reference to the amyloid and fatty kidneys, and to the large white kidney,-the kidney of chronic parenchyma-

The present case goes to tous nephritis. show that the same law applies to the con-

tracted kidney.

The section under the microscope shows an advanced stage of the morbid process. There is little or no cellular infiltration in any portion of this or of several other sections that I have examined, and in some portions nothing but fibrillar connective tissue can be seen. The adventitia of the blood-vessels is thickened, and the renal tubules are greatly atrophied. Where of normal calibre, however, the epithelial lining is intact. There are no tubes to be seen devoid of epithelium,-a sure sign that the process was interstitial from the beginning, and not secondary to a parenchymatous inflammation. The glomeruli are of diminished size, and are surrounded by a ring of connective tissue.

Abscess of the kidney. Presented by Dr. E.

T. BRUEN.

A. J., colored, æt. 38, was admitted to my wards in the Philadelphia Hospital, March 3, 1879. His account of his life during the months prior to his admission was very vague, but he had not been confined to bed. He had suffered from polyuria for several months: a week before the date of his application to the hospital for admission he had noticed a severe pain at the base of the left chest, accompanied with dyspnæa. The pain was particularly severe if he attempted to breathe deeply.

During the two weeks passed under my

care the symptoms were as follows:

He was very deaf, though previous to his admission to the house he had full possession of the sense of hearing; his sight had become impaired, and on one or two occasions he appeared blind. There was a marked tremor of the limbs, so much so that when in the erect posture he was compelled to grasp objects near him to prevent his falling to the floor. His intellectual condition was very nearly approaching imbecility. The temperature ranged from 101° F. to 103° F., the skin very dry, and a physical examination revealed an effusion in the left pleural cavity. There were no sweats or chills at any time.

Polyuria was very marked; he passed daily from one hundred and forty to two hundred and fifty ounces of urine. The urine was of very low specific gravity (1003); a trace of albumen by Heller's test; very scanty sediment, which, on examination, was found to contain a very few granular and hyaline

At no time during the period of my observation of his case did the above description

require modification.

It is to be observed that there was no hypertrophy of the heart, nor increased intensity of the aortic second sound. Death occurred March 19, 1879, the only change in the symptoms being an increased hebetude, with loss of strength, and the blindness and deafness increased. No retinal changes could be noted with the ophthalmoscope.

At the autopsy, made twenty-four hours after death, the viscera, including the brain, were carefully examined, but were found to be free from pathological changes, with the exception that the thoracic cavity contained a pint and a half of purulent fluid, and the kidneys, which I present this evening. The left kidney weighed six ounces, was fatty and somewhat contracted; the right weighed thirteen ounces. On cutting into it, the cortical portion was found to be occupied by laudable pus; the pyramidal portion contained pus at various points, the entire organ resembling the cavity of an abscess; no evidence of an embolic origin existing. The walls of the bladder were normal in every respect.

The symptoms during life led me to believe that my patient suffered from a contracted granular kidney, with pleurisy, to which I ascribed the high temperature. The general symptoms of transient blindness, deafness, and mental torpor I ascribed to approaching uræmia, notwithstanding the absence of important symptoms of this condition, as vomiting, convulsions, etc., and the presence of

the high temperature.

The etiology of abscesses of the kidney is so obscure that I have thought it desirable to record this case, although it is of a negative character.

Presented by Dr. JAMES Cystic kidney. Tyson.

The patient from whom the kidneys were removed was a gentleman, 43 years of age, whose business was farming and the purchase and sale of cattle, on account of which he made frequent fatiguing journeys to the West. He first consulted me in May, 1878, and related that his first illness was in 1864. It was evidently nephritic colic. Severe lumbar and abdominal pain continued to recur, more particularly after exposure to cold, until 1865, when he passed a small calculus. He was relieved for three years, having then another attack, during which he passed a sediment which he described as "steel-colored," and, finally, another small calculus, also "steel-colored." There was again an interval of relief until 1873, when there occurred a long series of attacks, in the last of which, in 1874, he passed quite a large stone, three-quarters of an inch long and one-third wide, which he described as having a white coating (phosphatic?). From this time there had been more or less dull pain up to the date of his visit. His urine, which for some time previous had been dark-hued, had lately assumed a lighter hue, and, while brick-dust sediment formerly was observed, it had lately disappeared. Pus was first observed in his urine in 1875, by Professor Reamy, of Cincinnati. He had had no acute attack during the year 1878, up to the date of his visit to me. had been sounded for stone in the bladder

four times-twice in 1864, once in 1865, and

once in 1875—without any results.

At the time of his visit to me he was getting up to pass water from four to eight times in a night, and during the day could not retain it longer than one and a half hours. His urine was pale-amber in hue, had a specific gravity of 1012, and deposited a considerable amount of pus (\frac{1}{16}\) bulk). There was also a small amount of albumen, not more than a line by Heller's acid-test. The bladder symptoms were very much relieved by sandal-wood oil, but he continued to have attacks of lumbar pain, always after exposure to reduced temperature, especially if he happened to be overheated at the time.

On the evening of January 15, one week after his return from a trip to the West during an extremely cold season, he was seized with one of his attacks, the pain being chiefly on the left side. The attack was one of unusual severity, but he was relieved by a hypodermic injection of half a grain of sulphate of morphia administered by his physician, Dr. W. H. Barr, of Middletown, Del. The relief was complete, but he remarked to Dr. Barr, on the morning of the 17th (about thirty-six hours after the attack), that he had not passed water since two o'clock of the 15th, and had no desire to pass any. I saw him on the 18th, reaching Middletown at two o'clock, just seventy-two hours after he had passed water. The bladder was empty, as shown by the use of the catheter. He was entirely free from pain, but was suffering a good deal from nausea, which had made its appearance the day previous. He was slightly drowsy, but he was so far conscious that he could pass the catheter on himself, as was his custom occasionally. The drowsiness, however, increased during the four hours I spent with him. He was cupped over the loins, and the cupping followed by hot cataplasms, and, in the course of the next nine hours, was freely purged by elaterium and sweated by jaborandi. The treatment availed nothing, however, in relieving the suppression. The drowsiness lieving the suppression. increased, and he died at noon of the 20th, one hundred and eighteen hours (within two hours of exactly five days) after he last passed

The autopsy was made by Dr. Barr, fifty-six hours after death. The bladder appeared not to have been examined, but all the other organs in the abdomen except the kidneys were normal. The latter are presented to the Society, but the left one has lost almost entirely the appearance which made them, in conjunction, among the most striking specimens of morbid anatomy I have ever seen. It will be observed that one (the right) is sacculated, the cysts ranging from half an inch to one and a half inches in diameter, and being round and oval; in one of them is imbedded a calculus as large as a pea. The others were filled with a yellowish and odor-

less fluid containing albumen. They were not lined with an epithelium. It is also larger than the normal organ, weighing six and a half ounces. The capsule was strongly adherent. Microscopic examinations of thin sections exhibit the appearances of interstitial nephritis, and the condition is evidently one of long standing, the result of the constant hyperæmia caused by the calculi which have from time to time formed, and all of which seem to have escaped except the one still shown in position. In the parenchyma numerous infarctions of blood are seen, and the epithelium is fatty in places. The left kidney exhibited a great and most interesting contrast to the right. It was throughout of a beautiful bright-scarlet color. It weighed seven ounces. The capsule was only slightly adherent; surface smooth. On section, it presented a homogeneous, very bright red color. It was hard in consistence. were no cysts. The pelvis was somewhat dilated. Microscopic examination showed large, swollen tufts, the epithelium of the tubules largely swollen and desquamated, the blood-vessels normal but over-distended by blood, with other features of a parenchymatous nephritis.

Dr. Tyson said there were one or two points to which he would like to refer. First, the question has been raised, How shall a cystic kidney be recognized? This was a question he had frequently asked himself, and he thought all cases might be divided into two classes, one comparatively easy and the other difficult of recognition. The former include cases accompanied by disease of the bladder; wherever there has been long-continued cystitis, especially in men, we may expect to find a cystic kidney. In the second series of cases, where there is no pus in the urine and no bladder symptoms, we cannot foretell the

condition of the kidneys.

He was interested also in the remarks made by Dr. Formad with regard to casts and albumen in interstitial nephritis. In none of the cases presented were casts found, although pus and albumen were present. This is constantly the case in cystic kidney. The absence of albumen with casts is a very rare occurrence, but it sometimes is seen, and, to avoid error, Dr. Tyson thought it better to make the microscopical examination before the chemical test for albumen.

Dr. STARR said that he recalled two cases in which casts were present in non-albuminous

irine.

The first, a boy  $3\frac{1}{2}$  years old, had scarlet fever early in March, 1875, and died of meningitis five months later. During the interval, he had had two attacks of acute desquamative nephritis. The first occurred, in spite of every precaution in regard to diet and exposure, on March 29, three weeks after the onset of the fever, and subsided about the end of April. The other began on June 1, the urine being

scanty, having a smoky appearance, a specific gravity of 1030, an acid reaction, and containing a large quantity of albumen, numerous epithelial- and blood-casts, and many free blood-corpuscles. On the 14th the urine became more copious and commenced to clear up, and by the 29th it was passed in abundance, was perfectly clear, and contained no albumen, but a few granular and hyaline casts. Subsequently, on July 25 and August 7, 8, and 10, the urine, which was normal in quantity, color, reaction, and specific gravity, was carefully examined and found to be absolutely free from albumen, though the microscope revealed many hyaline and slightly-granular casts.

The second case, a boy 5 years of age, had scarlatina in February, 1879. The attack was so light that the child was not considered ill enough to be put to bed or to require a physician. When I first saw him, on March 6, his hands and feet were still desquamating, and there was considerable anasarca. The urine was diminished in quantity, acid, darkcolored, deposited a soot-like material on standing, and contained a quantity of albumen and numerous epithelial, granular, and hyaline casts. He improved rapidly under treatment. On March 26, the dropsy had disappeared; the urine contained a few hyaline casts, but no albumen. On April I, there was a slight return of the renal congestion, indicated by the reappearance of the soot-like deposit and a small amount of albumen. Four days later the urine was again clear and free from albumen, but contained a few hyaline casts. From this time up to April 26, when the child passed from observation, apparently perfectly well, the urine was examined several times, and found to contain hyaline casts, although non-albuminous.

In the first case the microscopic examinations were made by Dr. Tyson; in the second by Dr. Simes.

Horseshoe kidney. Presented by Dr. H. F. FORMAD.

These anomalous kidneys are from a man, aged about 45 years, who died in the surgical ward of the University Hospital (service of Prof. John Ashhurst, Jr.). The diagnosis was cystitis and phthisis; the history I could not obtain. I recollect to have repeatedly examined the urine of this man in the pathological laboratory; it showed always the usual evidences of a chronic cystitis,—epithelial cells from different layers of the bladder, in connection with pus and a thick mucus,—but at no time were seen any tube-casts; albumen was found in small quantity.

The autopsy, which I made at the request of Dr. Palmer (the resident physician), confirmed the diagnosis, the wall of the bladder being greatly thickened, and showing numerous erosions of the mucous membrane covered with a thick mucus. There were also

foci of cheesy degeneration in the lungs, some of them softened and producing cavities.

The greatest interest, however, is presented by this rare and unexpected condition of the kidneys. The two kidneys were fused at the lower end through a band, forming a so-called horseshoe kidney. The right kidney occupied apparently the normal position in the body (perhaps a little higher than usual, as its upper end had moulded itself into the right lobe of the liver, producing in this organ a distinct depression); the left kidney had a nearly transverse position, a part of it and the uniting band lying across the spine. The weight of these combined glands is thirteen ounces, the right kidney being the largest (about three-quarters of the whole bulk), whilst the remaining quarter of the glandular mass represents the smaller (left) kidney and the uniting band. Each kidney has its own well-formed blood-vessels and a separate ureter. In addition, both kidneys are diseased, and it is remarkable that each of these glands is affected differently. The left one is made up of a number of cysts filled with a thick, grayish-white mass resembling putty, the whole secreting structure being destroyed. The capsule is adherent; length of the gland, five inches; breadth, two inches; shape, elongated; surface, smooth. The pelvis is dilated; its ureter obliterated. Examined microscopically, the inner surfaces of the cysts are not lined by epithelium, and the mass filling them is composed of pus, cholesterin, and débris of the glandular structure, with traces of former hemorrhages. The secreting structure is here probably atrophied and destroyed, through the pressure of continuous hemorrhagic infarctions. We have here a condition of the gland called sometimes surgical kidney, perhaps better denominated scrofulous kidney. The right kidney, on the other hand, is quite large, and pear-shaped; length, nine inches; capsule not adherent. When fresh, it was, on section, deep red. The gland is evidently hypertrophied from the continuous congestion called forth by its double work. Microscopically, it shows a typical parenchymatous ne-phritis. The uriniferous tubules are crowded with swollen, cloudy, epithelial cells, the glomeruli swollen, the blood-vessels highly congested, etc. No tube-casts were, however, seen in the tubuli.

The band by which the two kidneys were fused was surrounded by a great deal of adipose tissue; it is about two and a half inches long and one and a half inches thick, and, under the microscope, is seen to be made up of true kidney-structure, with an excess of connective tissue.

SALICYLIC ACID IN Tænia.—Ten grains of salicylic acid given hourly until four doses have been taken, and followed by a dose of castor oil, has been successfully used to expel tænia solium.

### REVIEWS AND BOOK NOTICES

ELEMENTS OF MODERN CHEMISTRY. By ADOLPHE WURTZ, Honorary Dean and Professor of Chemistry of the Faculty of Medicine of Paris, etc., etc. Translated and Edited, with the approbation of the author, by W. H. GREENE, M.D., formerly Demonstrator of Chemistry in the Jefferson Medical College, etc., etc. Philadelphia, J. B. Lippincott & Co., 1879. 12mo, pp. 697.

Dr. Greene deserves the thanks of the American public for having given to them the most practical and philosophically arranged elementary text-book on chemistry that has appeared since the establishment of the theories which have given to that science the

name of The New Chemistry.

From his laboratory in the Latin Quarter, the fame of M. Wurtz as a teacher extends over all Europe, his reputation as a chemist over all the world. It is therefore with satisfaction that we welcome his book, which is at once the illustration of his methods as a teacher and the exponent of the most advanced views now held by leading chemists.

It is translated from the fourth French edition into fluent and idiomatic English, which retains with singular happiness the terseness and brilliancy of the style of the original.

We are at first surprised at the absence of a table of contents, but find that it has been rendered unnecessary by the natural order and progressive arrangement of the subjects in the text and by a copious index.

A colored plate, illustrating spectrum analy-

sis, and one hundred and thirty-two cuts em-

bellish the work.

Among the matters introduced by the American editor, we notice the investigations of Clermont and Frommel in arsenic pentasulphide, the American process for the extraction of silver, the existence of borax in certain Californian lakes, and the synthesis of indigo

by the process of Baeyer.

We are impressed with the value of this work as a text-book for the beginner when we regard the simplicity and directness of the style in which it is written, the easy progression from the simplest facts to the principles which explain them, and the admirable way in which the phenomena of chemistry as an art are made subservient to and illustrative of chemistry as a science.

Notes on Rheumatism. By Julius Pollock, M.D., Fellow of the Royal College of Physicians, Senior Physician and Lecturer on Medicine, Charing Cross Hospital, Physician to the Foundling Hospital. Second Edition, London, 1879, pp. 115.

This little book presents the author's views in a manner so attractive and so concise that the reader wishes at the close that it had been a longer story,—a rare charm in modern med-

ical writing. Hence, perhaps, the speedy appearance of a second edition.

The description of the clinical course of acute rheumatism is extremely graphic and true to nature. The cases characterized by extreme hyperpyrexia are well termed by the

author "malignant."

To those who feel that much of the value of clinical reports is lost by reason of the present tendency to over-minuteness and undue elaboration of details in case-taking, the cases in the appendix will seem fresh and really illustrative of the course of the malady

as modified by the treatment.

The author treats acute rheumatism with the salicylate of soda in doses of ten, fifteen, or twenty grains every two, three, or four hours, according to the severity of the symptoms. Relief is apparent after eight or ten doses. He considers the addition of two or three grains of carbonate of ammonia advantageous, and uses camphor water as a vehicle. Unfortunately, neither salicylic acid nor its derivatives, which are now recognized as possessing great remedial power in the ordinary forms of acute rheumatism and in some of the forms of chronic rheumatism, have been found thus far effective in the malignant cases.

Tonics are called for at the period of con-

valescence in all cases.

There is nothing calling for comment in the chapers on so-called muscular rheumatism, which is discussed in the usual way.

## GLEANINGS FROM EXCHANGES.

THE EVIDENCE OF STILL-BIRTH.—Dr. S. W. Abbott, at the conclusion of an article on this subject (Boston Med. and Surg. Four., September 4, 1879), says that it may be inferred that a child has lived during and after its birth,-1. When the diaphragm reaches only to the fifth intercostal space. 2. When the lungs more or less completely fill the thorax. 3. When the ground-color of the lungs is broken by insular marblings. 4. When, by careful experiment, the lungs are found to be capable of floating. 5. When a bloody froth exudes from the cut surfaces of the lung on slight pressure. 6. When the air-cells are visible to the naked eye.

These proofs, complete as they are, may be strengthened by the cicatrization of the umbilicus, the scaling of the epidermis, the closure of the fœtal ducts, the size of the osseous nucleus of the inferior femoral epiphysis, the existence of milk, sugar, starch, or medicines in the stomach, determined by the appropriate chemical tests, and by the presence of fæcal matter other than meconium in

the lower intestines.

CONVERSION OF CALOMEL INTO CORROSIVE SUBLIMATE.—With reference to the question as to whether a mixture of calomel and sugar

made up into powders gives rise to the formation of corrosive sublimate, the testimony seems to tend to the negative. G. Vulpius (Archiv de Pharmacie, quoted by Bost. Med. and Surg. Jour., August 28, 1879) has arrived at the following conclusions: 1. No corrosive sublimate forms in twenty-four hours in mixtures of calomel with white sugar, milk sugar, calcined magnesia, carbonate of magnesium, or bicarbonate of sodium. 2. No such formation takes place in three months in mixtures of calomel with calcined magnesia. carbonate of magnesium, and sugar. 3. Mere traces of corrosive sublimate are found at the end of three months in a mixture of calomel, bicarbonate of sodium, and milk sugar. 4. A considerable quantity of corrosive sublimate forms in the same time in a mixture of calomel, sodium bicarbonate, and cane sugar. 5. Corrosive sublimate forms in calomel powders containing calcined magnesia or sodium bicarbonate, if digested with water. 6. The formation of corrosive sublimate in mixtures of calomel and alkalies, digested in water for a short time, is not favored by the presence of hydrochloric acid, but, on the contrary, hindered to some extent, on account of the neutralization of the alkalies by the acid.

NARCOTISM FROM NUTMEG.—Dr. Barry (St. Louis Clin. Record, 1879, p. 133) gives the following case. Mrs. N., aged 38, mother of four children, was confined on June 29, at nine o'clock. The child was a girl, and the largest I have ever seen; weight fourteen and one-half pounds. Labor natural and easy. Had a light spasm after the last pain. The spasm was hysterical. On the 30th the "old women" persuaded her to take nutmeg tea. One and a half nutmegs were used in making the tea, and she drank it during the day. About 10 P.M. she began to get drowsy. By four o'clock the next morning she was in a profound stupor. At 10 A.M. the narcotic effects of the nutmeg began to die out, and by 4 P.M. she had pretty well recovered. The symptoms were about the same as those produced by opium, and the remedies were the same.

Senecio Aureus (Golden Ragwort: Squaw-Weed) in the Rheumatic Diathesis.—Dr. N. S. Davis says that his attention was called two years ago to the use of the senecio aureus as a remedy of value in relieving chronic rheumatic irritation in any of the fibres of the body, and especially for removing that state of morbid sensitiveness we call the rheumatic diathesis. In one case he gave 0.3 cc. (mm. xlv) to 0.6 cc. (3iss) of the fluid extract made from the root, thrice daily, with very happy effect. Since then he had administered this remedy in a number of cases, and his success with it has been such as to lead his recommending its further trial.—
Chicago Med. Jour. and Examiner, September, 1879.

How to Extract Tape-Worm.—Dr. Bartlett has used male fern, pumpkin-seed, and

kousso, but gives preference to the latter. Care should be taken to prepare the patient for the operation of the medicine. Instructions should be given him to this effect: "It is idle for you to take this medicine without following my directions exactly. Remember when you have an operation to use a clean chamber, and after the evacuation note if the worm be passing; if so, do not attempt to pull it out, but lie down on the floor beside the vessel till another operation occurs, or, if one does not occur, take a large injection, once, twice, three, or four times, using, if you have it, doses of the worm medicine with the water. If the worm does not pass, send for me, letting it hang from you till I come. If circumstances render it necessary to remove the worm, draw upon it slowly and steadily. If once it is started, never stop the motion; keep pulling till the very fine neck appears, and then repeat the injection, and while the bowel is full of water, and if possible at the instant when its contents are discharged, draw again upon the worm, when it quite often will be washed out entire. Don't forget, while you are waiting with the worm protruding, to place something upon it, as the cover of the chamber, otherwise it may go When the worm is evacuated, make certain that no one empties the chamber before I come. Do not, out of idle curiosity, lift the worm up with a stick, or stir it; you may in this way lose the head."

Dr. Bartlett does not give a preliminary purgative, as he thinks the medicine is thus not only diluted by the more profuse secretions of the bowel, but is hurried through the intestine without a pause sufficiently long to allow of its effect upon the worm.—Chicago Med. Jour. and Examiner, September, 1879.

ETHIDENE DICHLORIDE AS AN ANESTHETIC.—Dr. R. Macphail, having given this anæsthetic in six cases, carefully observing its effects, says that, comparing it with chloroform, the ethidene possesses greater volatility and solubility, and to this appear to be due the rapidity of the action of the drug and the subsequent rapid recovery, while from its greater stimulant action on the heart, as shown by the pulse, and its rapid elimination from the system, it is a safer anæsthetic to use.—Edin. Med. Jour., September, 1879.

Nystagmic Movements of the Eyes

Nystagmic Movements of the Eyes caused by an Aural Affection.—Dr. Phüger publishes in the Deutsche Zeitschr. für Prakt. Med., 1878, No. 35, and Cbl. f. Med., May 31, 1878, a case of polyp in the ear, complicated with a chronic purulent catarrh of the middle ear, where nystagmic movements of the eyes and tendency to falling invariably appeared when the loop that had been put round the polyp was drawn tighter or even pulled. The author explains this case by assuming that the peculiar movements of the eyes were due to the fact that the irritation was propagated from the polyp to certain

peripheric portions of the brain. This assertion is supported by the situation of the polyp, its basis occupying a large portion of the external roof of the lateral meatus, especially of the tegmen tympani, and being immediately in front of the tympanum. Hitzig and Curschmann have proved that there exist in the brain several spots which when stimulated cause nystagmus.—Edinburgh Med.

Jour., September, 1879.

Syphilitic Inoculation with a Tooth-Brush.—Dr. Buchanan Baxter saw at Blackfriars Hospital a boy of 3, presenting a well-marked papular syphilide, with secondary sore throat. No primary sore was found, but under the left lower jaw an enlarged gland existed, which pointed to the gum as the seat of inoculation. The father was suffering at the time with an "ulcerated mouth," and the mother from a macular syphilide. The fact was elicited that the child had been punished six or seven weeks previously for sucking his father's tooth-brush.—Lancet, v. i., 70, May 31.

father's tooth-brush.—Lancet, v. i., 79, May 31.

LYMPHADENOMA OF THE TESTIS.—Profs.

Monod and Terrillon terminate a paper in the Archives Générales for July with the fol-lowing conclusions: I. Lymphadenoma, or tumor constituted by a tissue of new formation comparable to that of lymphatic glands, may be developed in the testis. 2. It constitutes a variety of sarcocele which is quite distinct in an anatomical point of view, the diagnosis of which in the living is not impossible. 3. It seems to affect the gland itself by preference, sparing the epididymis.

4. From the commencement the gland is attacked throughout its whole extent. The degeneration seems to commence in the intratubular cellular tissue, and invades secondarily the walls of the seminiferous tubes, which disappear themselves in proportion as the neoplastic tissue extends. 5. The lymphadenoma may occupy both testes simultaneously, - a fact that appears special to this variety of neoplasm of the testis. 6. Generalization takes place early and rapidly. frequent occurrence in the viscera and the bones, it may also involve cutaneous and subcutaneous tissue situated at a great distance from the primary seat of the disease. This and the preceding characteristic may prove of great utility in the diagnosis of the 7. This infection of the economy may, during a relatively long period, not give rise to any appreciable cacnexia. 8. This lymphadenoma does not appear to be accompanied by leukæmia. 9. Prognosis is fatal, and surgical intervention, up to the present time, has always proved useless. -Medical Times and Gazette.

INCOMPLETE RETENTION OF URINE.—Dr. Alfred Jean, whose paper on this subject took the Civiale prize in 1878, gives the tollowing résumé of his work in the Gazette des Hôpitaux, May 6, 1879:

Incomplete retention of urine should not

be regarded as an exclusively local affection. It may, perhaps, for a long time involve only the organs concerned in the secretion and excretion of urine, but these are the exceptional cases. Sometimes the attention of the patient is directed to the digestive apparatus, disturbances of which may be the initial symptom; but, whatever may be the beginning of the affection, always, or almost always, the greater part of the economy be-comes involved. The most important vesical lesion is the general hypertrophy of the bladder-walls, affecting the muscular elements of the different coats as well as the interstitial tissue. Prostatic obstruction acts principally on the circular and plexiform layers of the vesical walls, giving rise most frequently to horizontal bands, while urethral obstruction affects the external longitudinal layer. These changes are due to inflammatory processes. Subsequently the hypertrophied muscular fibres become constricted and paralyzed by a new formation of connective tissue, and imperfect contractions of the bladder result. The hypertrophic cystitis is followed by a true interstitial cystitis. In the kidneys are found interstitial and suppurative nephritis (surgical kidney). The principal symptoms are frequent and painful micturition, stagnation of urine, incontinence, polyuria, digestive troubles, fever, sometimes continuous, sometimes intermittent. Then follow uræmic poisoning and the cachexia. The prognosis is always very grave, except in cases of stricture.—New York Medical Journal.

## MISCELLANY.

In a letter to the London Lancet, the writer quotes the following passage from a letter written by Edison: "I am at present experimenting on a stethoscope, with every prospect of success; but the instrument will be very expensive, and for this reason cannot come into general use. The microphone (so called) cannot be used for this purpose, as it translates extraneous sounds, and is in no

way reliable.'

German Statistics of Old Age.—An officer of the Austrian Statistical Department, it is stated, has been collecting some curious facts, purporting to show the comparative longevity of several parts of Europe. Among a variety of other statements, he asserts that there are twelve thousand eight hundred and thirty-one persons over 90 years of age throughout the whole of Europe, of which number six thousand two hundred and three are women. In Italy, again, female life is superior to that of men, there being in that country two hundred and forty-one women over 100 years of age, and only one hundred and sixty-one men who have attained to three figures. Some allowance must, of course, be

made for the preponderance of women in the population generally, but when this has been done the female sex will still show the best average of long life, if those figures are accurate. In Hungary, on the contrary, there are more old men than old women, notwithstanding that in that country the females preponderate, though not to the same extent as in Italy. Austria, it is stated, has one hundred women who are over a century old, while only eighty-six men come under the same heading. The figures given seem to demonstrate that Germans are considerably longer lived than Sclaves. Among the Germans of Upper Austria and Salzburg there are eleven and a half per cent, of this population who come under the category of old people, while among the Sclaves of Galicia the percentage is but four.

RECOGNITION OF PROFESSIONAL DEVOTION TO DUTY.—The municipal authorities of Paris have recently caused the erection of a commemorative tablet in the Hôpital des Enfants Malades, to record the devotion of four physicians and pharmaceutists of that institution who have perished in the fulfilment of their duty, three having succumbed to diphtheria and one to smallpox. One of these was a

religieuse.

FRAUDULENT PULLNA WATER. - Professor Battandier, of Algiers, reports that imitations of this celebrated mineral water are sold both at Paris and at Algiers. The fraudulent water contains only traces of chlorides and of lime salts, but it contains in each litre fifteen grammes each of sodium sulphate and of magnesium sulphate.

AMERICAN GYNÆCOLOGICAL SOCIETY.-The following papers were read at the fourth annual meeting of the Society, which was held in Baltimore, Maryland, on September 17, 18,

and 19:

I. Annual Address,—The Gynæcology of the Future and its Relations to Surgery. By the President, Dr. T. G. Thomas.

2. The Justo-Minor Pelvis, with the report of a case. By Dr. W. T. Lusk.
3. Clinical Notes on the Hypertrophic Elongation of the Cervix Uteri. By Dr. W. Goodell.

4. The Principles and Practice of Gynæcology as related to Insanity in Women. By

Dr. A. J. C. Skene.

5. Complete Congenital and Accidental Absence or Atresia of the Vagina in the Pregnant and Unpregnant Female. By Dr. I. E. Taylor.

6. Idiopathic Septicæmia in Gynæcological

Practice. By Dr. J. R. Chadwick.
7. The Treatment of Puerperal Septicæmia
by Intra-Uterine Injections. By Dr. E. W. Jenks.

8. Intra-Uterine Medication. By Dr. J. P.

White.

9. Intra-Pelvic Dislocation of the Ovaries. By Dr. P. F. Mundé.

Io. Report of a Case of Extra-Uterine Pregnancy. By Dr. J. C. Reeve. II. The Early Application of the Forceps in the First Stage of Natural Labor. By Dr. I. E. Taylor.

12. Intra-Uterine Medication by Iodized

Phenol. By Dr. R. Battey.

13. A New Method of Performing Decapitation. By Dr. W. L. Richardson.

14. Mismanaged Labor the Source of much

Gynæcological Practice. By J. Tabor Johnson. 15. The Relations of Symptoms to Versions and Flexions of the Uterus. By Dr. E. Van De Warker.

The meetings were held in the Hall of the Johns Hopkins University, on Howard Street.

MEMBRANOUS LARYNGITIS FROM EAU DE COLOGNE.—Reid reports the case of a patient who, during a faint, received some cologne into her nasal passages, pharynx, larynx, and trachea. On the second day two small ulcers appeared in the pharynx, and a small piece of membrane was coughed up. Within ninetytwo hours a perfect cast of the larynx, trachea, and left bronchus was brought up in a piece, with instant relief to all urgent symptoms. Patches of membrane remained on the nasal mucous membrane till the end of the seventh day. The temperature varied from 99.4° to 07.4°, the pulse from 130 to 88. No albumen appeared in the urine. - Boston Medical and Surgical Journal; from British Medical Fournal.

## NOTES AND QUERIES.

#### HYPODERMIC INJECTION OF MORPHIA.

Dr. H. H. Kane, of New York City, who has for some time past been collecting statistics on the hypodermic injec-tion of morphia, would consider it a great favor if members of the profession who see this and have had experience with

of the profession who see this and have had experience with
the instrument will answer the following questions:

1. What is your usual dose?

2. Do you use it alone or with atropia?

3. What is the largest amount you have ever administered?

4. Have you had inflammation or abscess at the point of puncture?

5. Have you had any deaths or accidents caused by this instrument?

6. Do you know of any cases of opium habit thus con-

tracted?

Where there has been an autopsy (5), please state the fact and the results obtained therefrom. All communications will Where there has been all attropys (3), for and the results obtained therefrom. All communications will be considered strictly confidential, the writer's name being used only when he gives his full consent thereto. Address all letters to Dr. H. H. Kane, 366 Bleecker Street, New

#### OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY FROM SEPTEMBER 13 TO SEP-TEMBER 20, 1879.

MIDDLETON, P., CAPTAIN AND ASSISTANT-SURGEON.—Relieved from duty in the Department of the East, to take effect October 1, 1879, and to report to the Commanding General, Department of Texas, for assignment to duty. S. O. 215, c. s., A. G. O., September 17, 1879.

Adair, Geo. W., Lieutenant and Assistant-Surgeon.— Assigned to duty as Post-Surgeon, Fort Mackinac, Michigan. S. O. 161, Department of the East, September 13, 1879.

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